المنشورات العلمية والتقنية رقم: 580

الأمـراض الحيـوانيـة المصـدر والأمراض السارية المشتركة بين الإنسان والحيوانات

الطبعة الثالثة

الجزء الثاني: الأمراض الناجمة عن المتدثرات، والريكتسيات، والفيروسات

بيدرو ن. آتشا وبوريس تسيفيرس



صدرت الطبـعة الأنكليزية عن
منظمة الصحـــــــة العالمية
الإقـــــــــليم الأمريكي
PAHO

صدرت الطبـعة العربـية عن
منظمة الصحـــــــة العالمية
إقـــليم شـــرق المتوســـط
EMRO

الأمـراض الحيـوانية المصـدر
والأمراض السارية المشتركة
بين الإنسان والحيوانات

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صدرت الطبعة الأنكليزية عن
منظمة الصحة العالمية
الإقليم الأمريكي
2003

صدرت الطبعة العربية عن
منظمة الصحة العالمية
إقليم شرق المتوسط
2006

الأمراض الحيوانية المصدر والأمراض السارية المشتركة بين الإنسان والحيوانات – الطبعة الثالثة

Zoonoses and Communicable Diseases Common to Man and Animals – Third Edition

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

بسم الله الرحمن الرحيم

تقديم

الدكتور حسين عبد الرزاق الجزائري
المدير الإقليمي لمنظمة الصحة العالمية لشرق المتوسط

شهدت العقود الأخيرة ازدياد أهمية الأمراض الحيوانية المصدر والتي يشترك في المعاناة من ويلاتها الناس والحيوانات معاً، إلى جانب ازدياد وتعقيد وسائل المواصلات، وهو أمر أدَّى في مقابل ذلك إلى تسريع وتسهيل نشر العوامل الناقلة للأمراض، وإلى تضاؤل دور التباعُد في المسافات، فلم يَعُدْ بمقدور أي فرد أو مجموعة أن يكون بمأمن عن الإصابة بهذه الأمراض، ورغم قطع خطوات كبيرة على درب التقدُّم العلمي والتكنولوجي في تشخيص وتصنيف هذه الأمراض، ورغم الإنجازات الكبيرة التي تحقَّقت في مضمار المعالجة والوقاية منها، فإن هذه الأمراض لاتنزال تشكّل تهديداً خطيراً للصحة في العالم. وقد قام الزملاء في المكتب الإقليمي الأمريكي للصحة العالمية بإعداد هذا السفر حول الأمراض الحيوانية المصدر في ثلاثة أجزاء متكاملة، فلم نتردَّد في نقل فوائد هذا الجهد إلى بلداننا، بترجمته إلى اللغة العربية، وقد ساعدنا المركز العربي للتعريب والترجمة والتأليف والنشر في تحقيق ذلك، وهو أحد المراكز المتخصِّصة لجامعة الدول العربية، ويعمل من مقره في دمشق على توفير المواد التعليمية والتدريبية باللغة العربية للمؤسسات الأكاديمية والمهنية وللجامعات العربية، فجاءت الترجمة مثالاً على الاجتهاد في وضع تسميات جديدة باللغة العربية لكائنات لم تكن قد عرفت لها تسميات من قبل، وفي ذلك من التحدِّي ما يدفعنا للإشادة بالعاملين الصامتين الذين ساهموا في إنجاز هذا العمل، ولا يفوتنا أن نؤكّد على أن نجاح هذه الجهود ينبغي أن يترجم في حيِّز التطبيق بالاستفادة من مضمون هذا الكتاب ووضعه موضع التطبيق العملي، وتحديثه ونشر ما حفل به من معلومات على أوسع نطاق، وفي الختام، يرحِّب المكتب الإقليمي بتلقّي أي ملاحظات لاستكمال خصوصية البلدان العربية ولغتها في هذا الصدد.

والله الحق وهو يهدي على السبيل القويم.

الدكتور حسين عبد الرزاق الجزائري
المدير الإقليمي لمنظمة الصحة العالمية
لشرق المتوسط

[illegible]

[illegible] (PAHO) [illegible]

[illegible] safety [illegible]

[illegible] 1951 [illegible] (PANAFTOSA) [illegible] 15 [illegible] (INPPAZ) [illegible] 1991 [illegible] (CEPANZO) [illegible] 1956 [illegible] 1990 [illegible]

[illegible] 1902 [illegible]

[illegible] 1986 [illegible]

[illegible]

[illegible] emerging [illegible] reemerging [illegible]

[illegible]

MIRTA ROSES PERIAGO [illegible]

monographs

exotic

.metazooses

PEDRO N.ACHA

BORIS SZYFRES

models

Rickettsia prowazekii

1922

kuru

scrapie

pandemics

Lyme

1982

1977

[illegible] Borrelia burgdorferi [illegible] Rocio [illegible] Oropouche [illegible] Rift Valley [illegible] Cryptosporidium [illegible]

[illegible] 1986 [illegible] 1983 [illegible] pseudorabies [illegible] 1986 [illegible] 51 [illegible] Ehrlichia canis [illegible]

[illegible] monographs [illegible]

[illegible]

[illegible] (PAHEF) [illegible]

PEDRO N.ACHA

BORIS SZYFRES

الجزء الأول

أدواء المُتَدَثِّرات وأدواء الرِيكتْسيَات

RICKETTSIACAE [illegible]

Ehrlic- [illegible] tribes Rickettsieae [illegible] 1986 [illegible] ehrlichiosis [illegible] hieae [illegible] 1991 [illegible] Ehrlichia canis [illegible] (Dawson *et al.*,1991) [illegible] Rickettsiae [illegible] prokaryotic [illegible] Rochalimaea [illegible] eukaryotic [illegible] axenic [illegible] 0.3 × 0.5 [illegible] Gimenez [illegible] (*Weiss and Moulder 198; Mettler; 1991*) [illegible] Coxiella [illegible]

Dawson, J.E., B.E. Anderson, D.B. Fishbein, *et al.* Isolation and characterization of an *Ehrlichia* sp. from a patient diagnosed with human ehrlichiosis. *J Clin Microbiol* 29:2741–2745, 1991.

Mettler, N.E. Rickettsiales. *In:* Carballal G., J.R. Oubiño, eds. *Virologia médica*. Buenos Aires: El Ateneo; 1991.

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ASIAN IXODO-RICKETTSIONIS

ICD-10 A77.2

ICD-10 A77.2 Spotted fever due to *Rickettsia sibirica*

(*Dermacentroxenus sibiricus*) *Dermacentor marginatus* *R. slovaca* (Weiss and Moulder, 1984).

[illegible] 18 [illegible]

[illegible] boutonneuse [illegible] 7 – 2

[illegible]

[illegible] *Haemaphysalis* [illegible] *Dermacentor* [illegible] *Rhipicephalus* [illegible] hibernation [illegible]

[illegible] *concinna* [illegible] *nuttalli* [illegible]

[illegible]

stadial

(Harwood and James, 1979) 5

embryonated

Bosler, E.M., J.L. Coleman, J.L. Benach, D.A. Massey, J.P. Hanrahan, W. Burgdorfer, *et al.* Natural distribution of the *Ixodes dammini* spirochete. *Science* 220:321–322, 1983.

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BOUTONNEUSE FEVER

ICD-10 A77.1

ICD-10 A77.1 Spotted fever due to *Rickettsia conorii*

[illegible]

[illegible] R. conorii [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

España,) [illegible] 1982 [illegible] 85 [illegible]

[illegible] 298 [illegible] %5 [illegible] .(Ministerio de Sanidad y Consumo, 1983

[illegible] %90 [illegible]

[illegible] %20 [illegible]

[illegible] .(Saz *et al.*, 1993)

[illegible]

[illegible] 1974 [illegible] 87 [illegible]

.(Mansueto *et al.*, 1985 [illegible] 1993 [illegible] 1.128

[illegible]

[illegible]

.(Heisct *et al.*, 1962) [illegible] reactors [illegible]

[illegible]

[illegible]

[illegible] (Philip *et al.*, 1966) [illegible]

[illegible] .(Kaschula *et al.*, 1978) [illegible]

[illegible]

[illegible]

[illegible] %81.5 .(Trningali *et al.*, 1986) [illegible] %80 [illegible] 481 [illegible] .128:1 [illegible] %45 [illegible] 32:1 [illegible] 92 [illegible] %30 [illegible] .(Raoult *et al.*, 1985) [illegible] .(Keysary *et al.*, 1988) (%84 – %82) [illegible] 2.8 [illegible]

[illegible] *tâche* [illegible] (*noire* [illegible] 7 – 5 [illegible] %5 [illegible] 7 [illegible] 142 [illegible] .(Raoult *et al.*, 1986) [illegible] 24 [illegible]

(Yagupsky and Wolach, 1993)

R. sharonii

Goldwasser *et al.*, 1974

H. leachi

...BHK-21 ... L ... G ... (IgM ... M ... (Edlinger, 1979) ... Leitner *et al*.,) ... (2002.

Benenson, A.S., ed. *Control of Communicable Diseases in Man*, 15th ed. An official report of the American Public Health Association. Washington, D.C.: American Public Health Association; 1990.

Burgdorfer, W. Boutonneuse fever. *In*: Hubbert, W.T., W.F. McCulloch, P.R. Schnurrenberger, eds. *Diseases Transmitted from Animals to Man*, 6th ed. Springfield: Thomas; 1975.

Edlinger, E. Serological diagnosis of Mediterranean spotted fever. *Ann Microbiol* 130:203–211, 1979.

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Mansueto, S., G. Vitale, M. Scalise, *et al.* Indegini siero-epidemiologiche sulla febre bottonosa in Sicilia Occidentale. III Ricerca di anticorpi anti *R. conorii* in sieri umani e canini dell'isola di Ustica. *Clin Vet* 108:56–60, 1985.

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FLEA-BORNE TYPHUS

ICD- 10 A75.2

ICD-10 A75.2 Typhus Fever due to *Rickettsia typhi*

endemic … murine … urban

(*R. mooseri*) *Rickettsia typhi* … *R. prowazekii* … *R. canada* … *Haemaphysalis leporispalustris* …

Myers and) %79 %70

.(Wisseman, 1980

cross-challenge

.(Weiss and Mouleler, 1984) toxin neutralization

1967 1963

241

1946 1946 1931 42.000

.(Chin, 2000) 80

enzootic

%74 1984 1980 200

.(Taylor *et al*., 1986) %85

1985 49

30 .(Tselentis *et al*., 1992)

254 .(Graves *et al*., 1992)

1978

.(Al-Awadi *et al*., 1982) %80

scrub

[illegible] 1985 [illegible] 170 [illegible] 8 [illegible] 4 [illegible] (Brown *et al.*, 1988) *Rattus Exulans* [illegible]

[illegible] *Exulans* [illegible] *Xenopsylla cheopis* [illegible] *Ctenocephalides felis* [illegible]

[illegible]

[illegible] 14 – 6 [illegible] 6 – 5 [illegible] 200 [illegible] %58.1 [illegible]

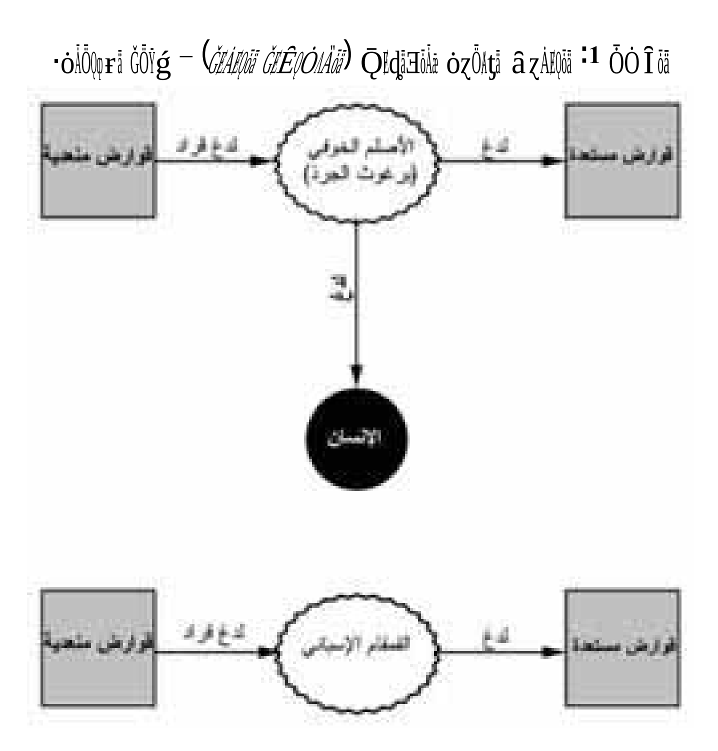
%44.9

%1

progeny

Polyplax spinulosa

Ctenocephalides felis



enzootic

embryonated

Neil-Mooser

[illegible] Wisseman,) [illegible] (1982 [illegible] (Elisberg and Bozeman, 1979) [illegible]

[illegible]

[illegible]

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[illegible]
INFECTIONS CAUSED BY *BARTONELLA HENSELAE*

[illegible] *Bartonella henselae* [illegible] %37 [illegible] %25 [illegible] *B. quintana* [illegible] *Arvicola* [illegible] vole [illegible] *terrestirs* .(Weiss and Moulder, 1984) *Pediculas humanus* [illegible]

[illegible] Groves and Harrington,) [illegible] *Elizabethae* [illegible] *Vinsonii* [illegible] .(1994 [illegible] 2 – 1 [illegible] bacillifom [illegible] 0.6 – 0.5 [illegible]

stove °35 %5 %5

.(Welch *et al.*, 1992; Regnery *et al.*, 1992a) 5

bacillary (bacillary angiomatosis (parenchymatous peliosis

.recurrent rickettsemia

.(Benenson, 1990)

22.000 2.000 .(Jackson *et al.*, 1993)

Afipia

41 %88

.(Regnery *et al.*, 1992b) %25

1992

.(García *et al.*, 1982) 100

[illegible] 7 [illegible] 61 [illegible] %41 [illegible]

[illegible] argentic [illegible] (Koehler *et al*., 1992; Groves *et al*., 1994) [illegible] 3 [illegible] 1992 [illegible] %100 [illegible] %99 [illegible] Koehler and Brenner,) [illegible] %70 [illegible] .(1993

[illegible]

[illegible] anabolic [illegible]

[illegible] [48] [illegible] [42] [illegible] (1993) [illegible] recurrent rickettsemia [illegible] (Lucey *et al.*, 1992) [illegible] meningism [illegible] [3] [illegible] (Slater *et al.*, 1994) [illegible]

[illegible] [6] [illegible] Groves and) [illegible] (Harrington, 1994 [illegible]

[illegible]

(%41) 61 25 (Koehler *et al.*, 1994) 18 (Regnery *et al.*, 1992)

12 Goves and Harrington) (1994 tomcats

(Regnery *et al.*, 1992b)

%3 41 %88 107 (Slater *et al.*, 1994)

Benenson, A.S., ed. *Control of Communicable Diseases in Man*, 15th ed. An official report of the American Public Health Association. Washington, D.C.: American Public Health Association; 1990.

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Q FEVER [illegible] Q

ICD-10 A78

[illegible] (Pneumorickettsiosis [illegible] Q [illegible] (Coxiellois [illegible] (quadrilateral [illegible] (hibero-vernal [illegible]

[illegible] Coxiella burnetii [illegible] filterability [illegible] (Weil-Felix [illegible]

[illegible] 0.4 – 0.2 × 1 – 0.4 [illegible] burnetii [illegible] phagolysosomes [illegible] (Weiss and Moulder, 1984) [illegible]

[illegible] coccoid [illegible] (MaCaul and Williams, 1981) [illegible] BGM [illegible]

(Aitken *et al.*, 1987) morphogenesis

S-to-R (I, II) I II

51

1970 2.000 100 1979 (Hunt *et al.*, 1983)

(Heard *et al.*, 1985)

310 360 1976

46، 17، 25 ... 1984 ... 1981 ...

Ortiz Molina et al.) ...

... 1976 ... 15 ... .(1982

... (%36.5) ... 62 ...

... 110 ... .(Pavilanis et al., 1958) ... 18

... 149 ... .(Buckley, 1980) ...

.(Blidaru et al., 1982)

... 45 ...

.(Blidaru et al., 1980) ...

... 1971، 1969 ...

:1992 ... (Spinelli et al., 1981; Meiklejohn et al., 1981; Hall et al., 1982)

... 68 ...

... (Schneider et al., 1993) ... 28 ...

Gerth et) ...

... .(al., 1982

.(Babudieri, 1959) 2.000 20.000

Serbezov *et a*l.,) 313 1.070 (2000) .(1999

parturient 32 16

Marrie *et al.,)* .(1989

415 1983 900 – 850 12 %21 5 %93 %46 .(Dupris *et al.,* 1987)

Stoker and) 19 .(Marmion, 1955 .(Harvey *et al.,* 1951)

Holland *et)* .(*al.,* 1960

Kumar and) ... (python ... (Yadav, 1981

(Lorbacher and Suárez, 1975) ... 482 ... %57

2.097 ... %57 ... %24 ... 1.475

(Ruppaner *et al.,* 1982)

%20 ... %15

(Lang, 1989) 1984 ... %67 ... 1964 ... %2.7

Lang *et al.,*) ... 103 ... 22

(1991

52 ... %40.4 ... %39

32 ... %62.5 ... 42 ... %53

(Reinthaler *et al.,* 1988)

%6.2 ... 104 ... %19.2

Higgins and) ... 97

(Marrie, 1990

%3 ... 15 ... 759

%1.2 .(Rieman *et al.*, 1979) 538 %20

Yadav and Sethi) 91 %14.3 342

.(1980

%10.2 76.5 (aurochs) 47

.(Ciecierski *et al.*, 1988) 39

20 39

14 – 9 remittent

10

Richardus *et al.*,) 16 3 18

40 .(1985

.%1

(1998 – 1985 1.070)

.(Raoult *et al.*, 2000)

(%11) 92 .%65

Palmer and Young,) [illegible] 10 [illegible] 839 [illegible] 313 [illegible] 259 [illegible] .(1982

.(Raoult *et al.*, 2000) [illegible] (1987) [illegible] 28 [illegible] 20 [illegible] 1 [illegible] %89 [illegible] (%86) [illegible] 28 [illegible] %46 [illegible] (%80) [illegible] (%68) [illegible] (%60) [illegible] %39 [illegible] .(Fenollar *et al.*, 2001) [illegible]

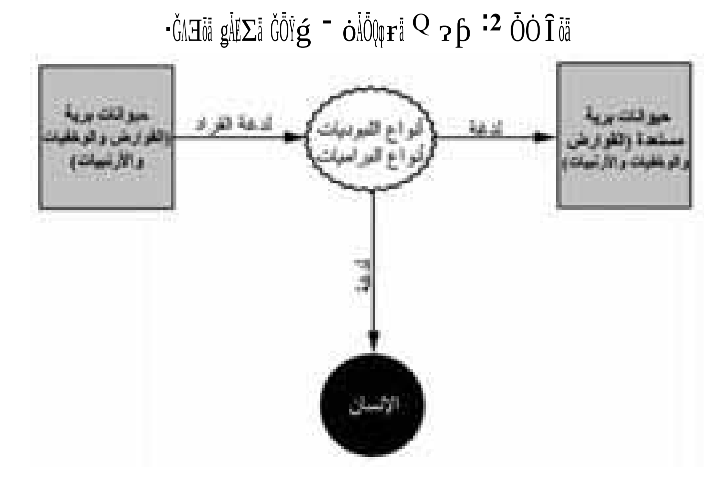
[illegible] .(Chin, 2000) [illegible]

[illegible]

21 1974 78

(Crowther and Spicer, 1976)

%7 %2



34 … 33 … 11 … cotyledons

40 … 11 … 8 …

6 … (Sanford *et al.*, 1993) … 12 …

(Marrie, 1990) …

3 … 2 …

38

Isotypes

M

A

(Sawyer *et al.*, 1987)

(Aitken *et al.*, 1987)

I

II

%90

%65

[illegible] %50 [illegible] resuspension [illegible] %92 [illegible] Hunt *et al.*,) [illegible] .(1983

[illegible] .(Ascher *et al.*, 1983) [illegible]

induration

(Williams *et al.,* 1992)

4.000

1984 – 1981

8

(Marmion *et al.,* 1990)

98

7 15 102

Shapiro *et al.,*)

(1990

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QUEENSLAND TICK TYPHUS

ICD-10 A77.3

ICD-10 A77.3 Spotted fever due to *Rickettsia australis*

R. australis Tasmania (Flinders .(Baird *et al.*, 1992)

.(Graves *et al.*, 1993)

[illegible] 1.000) [illegible] 1989 [illegible] 12 [illegible] 10 [illegible] 17 [illegible] %1 [illegible] .(Graves *et al.*, 1993) [illegible] 24 [illegible]

[illegible] 312 [illegible] %11.2 [illegible] %15 [illegible]

[illegible] %89 [illegible] :*Rattus Fuscipes* [illegible] Graves *et*) [illegible] %22 8 [illegible] 37 [illegible] .(*al.*, 1993

[illegible] maculer [illegible] eschar [illegible]

[illegible]

.(Sexton *et al.,* 1991)

tasmani

Ixodes holocyclus

cornuatus

Aponomma hydrosauri

°34.5

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RICKETTSIAPOX

ICD-10 A79.1

ICD-10 A79.1 Pustular rickettsiosis due to *Rickettsia akari*

gamaso-rickettsiosis varicelliformis

Dernacentro- *Rickettsia akari* *xenus murinus* coccobacillus

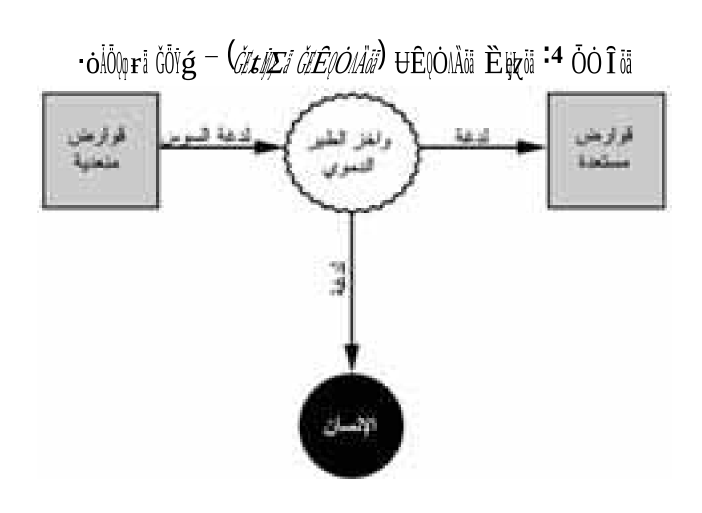
natives vole

Radulovic *et)* [illegible] .(*Microtus fortis pelliceus* .(*al.,* 1996

[illegible] 1946 [illegible] 144 [illegible] 180 [illegible] 1979 [illegible] 5 [illegible] (Brettman *et al.,* 1981) [illegible]

[illegible] .(*Rattus* [illegible]) [illegible] (*Mus musculus* [illegible]) [illegible]) *Liponyssoides sanguineus* [illegible] .(*Allodermanyssus*

[illegible]) [illegible] .varicelliform [illegible] 24 – 9 [illegible] .(Brettman *et al.,* 1981) [illegible] .(Brettman *et al.,* 1981) [illegible] 5 – 2 [illegible] 6 [illegible] 250 [illegible]



(Weiss and Moulder, 1984)

.(Harwood and James, 1979; Bell, 1981)

.(Benenson, 1990)

Bell, J.R. Tick-borne fever and rickettsialpox. In: Davis, J.W., L.H. Karstad, D.O. Trainer, eds. *Infectious Diseases of Wild Mammals*, 2nd ed. Ames: Iowa State University Press; 1981.

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Woodward, T.E., E.B. Jackson. Spotted fever rickettsiae. *In*: Horsfall, F.L., I. Tamm, eds. *Viral and Rickettsial Infections of Man*, 4th ed. Philadelphia: Lippincott; 1965.

Zdrodovskii, P.F., E.H. Golinevich. *The Rickettsial Diseases*. Oxford: Pergamon Press; 1960.

[illegible]
ROCKY MOUNTAIN SPOTTED FEVER

[illegible] [illegible] **ICD-10 A77.0**
ICD-10 A77.3 Spotted fever due to *Rickettsia rickettsia*

macular [illegible] petetchial [illegible] pinta [illegible] Choix [illegible]

.(*Dermacentroxenus* [illegible]) [illegible] protype [illegible] Raoult and Walker,) [illegible] phagosome .(1990

[illegible]

[illegible] 1973 [illegible] 1970 [illegible] 528 [illegible] 4.411 [illegible] 1980 – 1977 [illegible] 1981 [illegible] 1.170 [illegible] 1.103 [illegible] 100.000 [illegible] 0.25 [illegible] 1989 [illegible] 603 .1989 (CDC, 1990) [illegible] %1.1 [illegible] 1982 [illegible] %4.7 [illegible] .(CDC, 1991) %7.6 [illegible] 649 [illegible] 1990 [illegible] 1930 [illegible] 1910 [illegible] (*Dermacentor Variabilis* [illegible]) [illegible] (%37.1) 224 [illegible] (%16.6) 100 [illegible] 603 100.000 [illegible] 1.9) [illegible] .(CDC, 1990) ([illegible] 100.000 [illegible] 1.8) [illegible] 9 – 5 [illegible] 487 [illegible] %63 [illegible] .(CDC 1990) [illegible] 20 [illegible] 5.2 [illegible] .(Bernard *et al.*, 1982) [illegible]

[illegible] .(*Sylvilagus* [illegible]) [illegible]

Weiss and) [illegible]
.(Moulder, 1984; Raoult and Walker, 1990

[illegible] .(Smith *et al.*, 1983) [illegible] 73 [illegible] %45.2

[illegible] huskies [illegible] .(Breitschwerdt *et al.,* 1985) [illegible] 12 [illegible] 7 [illegible] 5 [illegible]

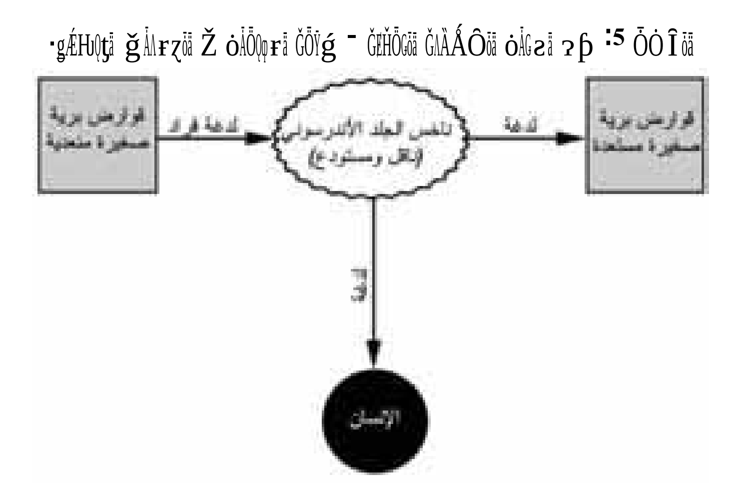
[illegible] 14 – 2 [illegible] °40 [illegible] Raoult and) [illegible] 6 – 3 [illegible] .(Walker, 1990 [illegible] %80 [illegible] delirium [illegible] Kirkland *et*) [illegible] 30 [illegible] .(*al.,* 1993

[illegible] %4.5 [illegible]

.(CDC, 1990) %1.2 Бǚ

ÆÅȝ ÅŤŢǨ Æę ·ƙΛƎöä ŏÅΛζϙϳä ȽŢȞŋ Ž ģÅŁÅş Ƙɖ ʔşÆȞöä :ğÅϕäζŒΣä Ž ôÅţä ÅŤΛÆö ÒÅì ¯ āƳõ 4 ȡŋ 3 ʔÆö ȷÅõ ·ĞΛÅΛÅè ôäÅȝǚ ÅĚȞĚĠù şǚ ÅĚĠΛÅΘ ĞΛÆȞÅţä āƳÒöä ÛģǚøǚøşȳäζϙƙÅϙäÆÅȝ ÅŤşş·ȽŤęş āÅÅϕõäş ɄøΛÛä ƁǚşĞĚöÅȝʔƥ¯ÅĚDZζöşƘè ôÅţä ÇÆÅȝ ÅŤŢǨ ȽŸζ ȝäÅöäÅŋǚÛĞΛζȶÅöäĞĚùÅÅţä Ž ĞΛƎǵ ȣşÂøϙşĞȶΗϕŸŋ āÅŤϕöä ǬöÅϙÆÅȝş ·ĞΛÅΛÅè ôäÅȝǚ

·ģÆΗϕţä ğÅΛɼζöä Ž ȯÅÕϕɼä ĞÕŸǵ ¯ ĞĚȞÕĞöä ĞΛÅÅÔöä ȯÅĞƨä ʔƥ :5 ŌÒÎöä



ÛÅÒĞŋ Åȶȝ Ž *ĞĚÊϕÒΛÅöä ĞĚÊϕÒΛÅŸö* ĞϕζùζţäĘùÅÅţä Ž āƳÒöä ôÅȞϕΛȷǚŌȶϕǂäȡŋ āƳÒöä ôÅȞϕǨ ÅŋÆÅȝ :ŐöǾäş ÛôÅţä ȡŋ ȽĚǹş ŌÒì ȡŋ ÅŤΛÔƠ ĞĚŋζŋϳä ấäÆȑϳä ȷǚş .(Lissman and Benach 1980) ĞΛÅΛÊöä ʔşÆȞöä ȳşÅÕǨşŌȝÅζ ŌÒÎä ĞȞÅư ȷζÒǨ ÆȞä ÅȶĚζ ǰĚƨ ÛȽŤę Ûȳäζϙ :1985 ȳÅȝ *ȼȩÅζøş* ấƘÅÎǨÅä ÅŤÅòş ĞĚìÅζ Ž ĞĚöÅϕöä ôäÅȝϳä ğÆŁζì ÆÕȞöä ȽÅȒǨş ʔƥş ÛĞĞŸÔöä Ž ĞΛζŋÆöä ĞĚȝşϳä ȷÅÕϕǵä ÛĘèÅΛǨ ȳÆȝ ÛɄøÆȝş ɄÅϕǚ Ûğ ɼÅǵ ȝäøǚ ȡȝ ÅΛÅÕǨ Ž ·ĞĚŸÔΛζΣä ĞĚĠÔÕöä ğäζòϳä ģấΛäş ȯÅΗÛöä ȽÅȒǨş ÛĞĚÅȶŸöä Ž ĞΛÅΥ ĞΛÆŸDZ ğÅζǚ ğøζÛǨ ÆÕζ Ûôä Åţä ȡŋ ĞÅŸϕƯ ğÅŋƳȝ ȡŋ āƳÒöä ģÅϕÅȞŋ Бǚ ĞζÅȓǚş ȷÅõ .(Weiser and Green, 1989) ȣäÅùϳäş ğÅȶĚŸΣäş Ȥϕϳäş ȷæϳä ĞŸΛÆèş ȡÅÔöä ÆȞä ǨĚÅì ĞÅĚÅǹ ĞĚÅĚȝ ğÅζǚ ÅĚDZζöşƘè ÅŁÆÅȝ ÒĚÅÎϕöä ǨĞϕǚ ÅĞŸõ 11 ȡŋ āƳõ 9 ʔÆö

(Davidson *et al.*, 1989)

(Feng *et al.*, 1979)

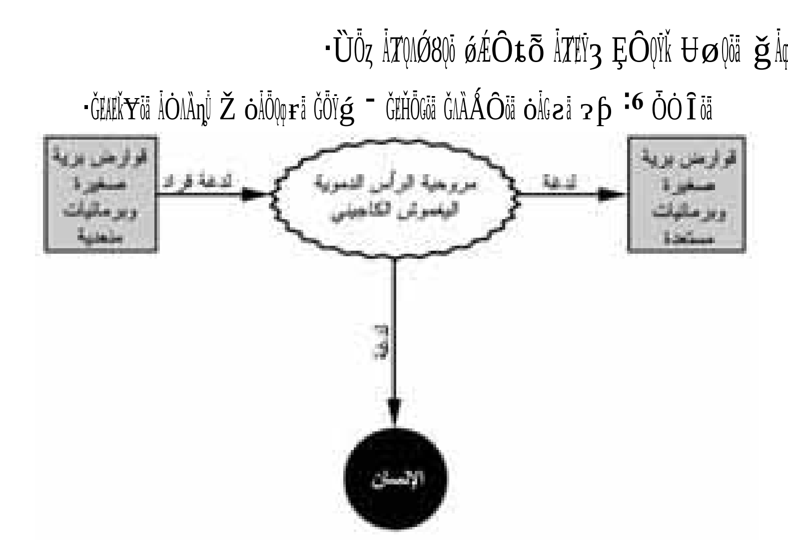
Amblyomma cajnnense

Sylvilagus Leporispalustris

(Fuentes *et al.*, 1985)

(*Sylvilagus*

(Burgdorfer *et al.*, 1980)



reacrivate

[illegible] 6 – 4 [illegible]

[illegible] antecedent [illegible]

[illegible] (CDC, 1990) (%70 – %50 [illegible] 5 [illegible] 4 [illegible]

[illegible] (Sexton *et al.*, 1994) [illegible]

(Clements *et al.*, 1983a) [illegible] 6 [illegible]

(%25

.(Clements *et al.*, 1983b)

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SCRUB TYPHUS [illegible]

[illegible] ICD-10 A75.3
ICD-10 A75.3 Typhus fever due to *Rickettsia tsutsugamushi*

[illegible] Tsutsugamushi [illegible]

[illegible] *Rickettsia tsutsugamushi* [illegible] *typhos* [illegible] (*R. orientalis* [illegible] stupor [illegible] prototypes [illegible] homologus [illegible] Shirai and Wisseman,) [illegible] 168 [illegible] %68.5 [illegible] .(1975 [illegible] *Leptotrombidium* [illegible] .(Shirai *et al.,* 1981) Karp [illegible]

[illegible] 1.2 [illegible] .(Weiss and Moulder, 1984) [illegible]

[illegible]

trombiculid

18.000

%35.3 %0.6

1974 1967

55

%3.9

%3.2

.(Brown *et al.*, 1978)

1950

1989 152 1982

%90 .157

6 5

.(Kaiho *et al.*, 1993) Kuroki

88

113

Kato Gilliam, Karp

(Chang *et al.*, 1990)

%77

voles (*Rattus*) shrew (*Apodemes* Zoogeo- graphic

(Saah, 1991) °40.5 – °40

parameters inoculum

(%34) 30 psychomotor excitation

%85 87

Berman and Kundin, 1973; Saah,) (1991

Ž ǴĚèȦèɟä ǴĚȓȦţä ğȦɀɟä ÆDZɀǩ Æę ʔȦǹɟä ğȦĚÊǭȮȦöä öäşǻǚ Ž Ȧŧõş ·ǻǴöȦɖ ǴŸǨȦę Wisseman,) %30 Бǚ %0 ȸŋ ğɍȦΣä ǴǨȦŋǚ ȯÆȞŋ dzşäȦǭ Æę ·ǥǨ8Ôöä ǴȦɀŋÆöä ǴĚȝşɟä ·ƙȦÊţä îȦǺìɟä ȸŋ ƘǯȮæ ʔŸȝǚ ȷɀȮȦş Û(1982

ȦŢĚŸǩ ǴĚöȦȝ ǴĚəÆæ ǴȝȦDZ ʔÛȞǩ ·ɃɀŧȦöä ƙŸȮĚèȦǭǭöä ȸŋ ǴȦÆĚŸǬǭöä ǴƨȦȞţä Ɀöüǭǩ ǴǫŸǯöä ÿȦɟä ȯŸǹ ǴƨȦȞţȦæ öÆǴöä Ź äæǚ ÈȮȦöä ǫÆƷ Æę ·ţɀǴèǚ ȯŸǹ ȦĚŋɀȦ ğȦȝȦDZ 4

ȸŋ ǥÆĚǵş ǴȝȦDZ öȦÛȝǚ ȷǚ ÆDZş :(ȷäɀȦǭæ) øşǻȦȮÊǴöä øȦDZş ȦȦÂĚöȦŋ Ž · ô Ȧţä ȸŋ Бşɟä

.(Benenson, 1990) ǻɍȦȞɀ ȷȦõ Бäɀǭöä ʔŸȝ ÿȦȦǚ 5ş 7 ŋõ/ŋŋ 5 ƙŸĚÊĚÊõşÆöä

·ǴĚȞĚǴÛöä öȦȦɀǭɟä Ž ǻĚǴÊǭ ǴȦĚȦǹ şǚ ǥȦŁȦş Ƙɖ ʔşÆȞöä ·ğȦǭäɀĚΣä Ž ô Ȧţä

·ȯȦÕǭɍä ǴÕŸǵ - (*ǴĚìɀŋȦɖɀÊǩɀÊǭöä ǴĚÊǭȮȦöä*) БȦõɟä âɀȦĚǭöä :7 ŌȮÎöä

ǴĚÊǭȮȦŸö ǴĚƵǚ ȦǯõɟäŌęäɀȦöä :(7 ŌȮÎöä) ȯȦÕǭɍä äȦüş ʔşÆȞöä øÆÔŋ

öȦŧĚÛʅä ÒǹɟȦæş Û*öȦŧĚÛʅä* ÈȦDZ ȸŋ âɀÊöä ȸŋ ǥÆȦÆȝ ţäɀǭǚ ɄŁ *ǴĚìɀŋȦɖɀÊǩɀÊǭöä*

L. *ǴÛÛȦţä öȦŧĚÛʅäş* Û*L. arenicola* *ǴŸŋäȦöä öȦŧĚÛʅäş* Û*L. akamuohi* *ǴĚìɀŋȦõɟä*

L. pavlovsky *ǴĚȮÊɀɀŸɀȦǴöä öȦŧĚÛʅäş* *L. pallidum* *ǴǴǵȦÎöä öȦŧĚÛʅäş* *deliense*

.ecosystem ǴöȦʅä ǥöȦǴţä ÆÊǵ ŌęȦȦöä ţɀȦöä ⱫŸǭƩ ·*L. flatcheri* *ǴȦȦÎĚŸȦöä öȦŧĚÛʅäş*

ȝĚæȦöä Ž öȦţȦæ Ȧŧ8ǩ ɄøǭöäǴęşȦǂä ȯɀŌΣä Ž *ǴĚìɀŋȦõɟä öȦŧĚÛʅä* ÆDZɀǩ ȯȦǯţä ŌĚǴè ʔŸȞɀ

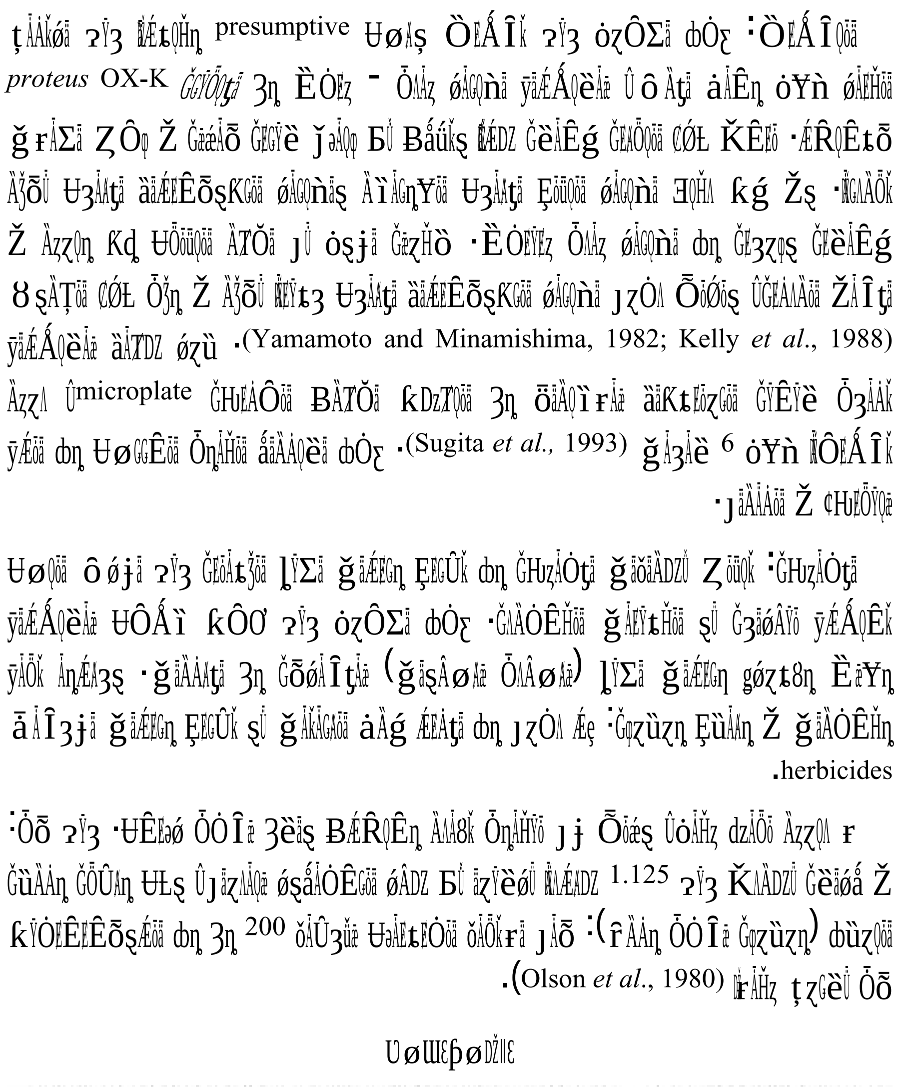
Ž ǻǴöȦɖ ǻɀDZɀŋ âɀÊöä ·ȯȦɖǻɟä ȝŋ ǻÖɀäȦǩ ȦǯõǚǴÛÛȦţä öȦŧĚÛʅä ƙǵ Ž ÛⱫĚÔöä ǴȦäÆæş

(Saah, 1991)

(Weiss and Moulder, 1984)

%20

transporters



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ZOONOTIC CHLAMYDIOSIS [illegible]

[illegible] ICD-10 A70
ICD-10 A70 *Chlamydia psittaci* infection

[illegible] psittacosis [illegible] Ornthosis [illegible] parrot

[illegible] TWAR [illegible] *C. pneumoniae* [illegible] *Chlamydia trachomatis* *C. pecorum* [illegible] *C. psittaci* [illegible] (Fukushi and Hirai 1992; Kuroda-Kitagawa *et al.*, 1993) [illegible] strict intracellular parasitism [illegible]

[illegible] elementary [illegible] 8 – 6 [illegible] internalize [illegible] reticulate [illegible] 24 – 18 [illegible] 0.3 – 0.2 [illegible] reorganization [illegible] (0.3 – 0.2) [illegible] (0.8) [illegible]

(Keratoconjunctivitis

biotype

(ornithosis

C. pecorum

psittacosis

endonuclease restriction

serovars

.(Andersen and Tappe, 1989)

.%30 %5

.(Grimes and Wyrick, 1991)

Duck

8

(Spears and Storz, 1979)

[illegible] %15 [illegible] *C. pecorum* [illegible] homology [illegible] %88 [illegible] .(Fukushi and Hirai, 1992) [illegible]

[illegible]

[illegible] 1939 [illegible] 1929 [illegible] 12 [illegible] 300 – 200 [illegible] 1.000 [illegible] .(Schachter, 1975) [illegible] 4 [illegible] 98 [illegible] 28 [illegible] 1976 [illegible] 1974 - 1978 [illegible] .(CDC, 1982) [illegible] 80 [illegible] 27 [illegible] 1981 [illegible] 21 [illegible] .(Filstein *et al.,* 1981) [illegible] 2 [illegible] (%66) 122 [illegible] 186 [illegible] 1986 [illegible] .(Hedberg *et al.,* 1989) [illegible] 1.072 [illegible] 1963 [illegible] 1949 [illegible] (%16) 80 [illegible] 13 [illegible] 1985 [illegible] .(Caffarena *et al.,* 1993) [illegible] .(Newman *et al.,* 1992) [illegible]

[illegible] 150 [illegible] .(Nagington, 1984) 1983 [illegible] 1975 [illegible] 300.000 [illegible] .(Williams, 1989) 1984 [illegible] 1975 [illegible] 8 [illegible] 1.136 [illegible]

[illegible] 180 [illegible] 1977 [illegible] 1976 [illegible] 26 [illegible] 949 [illegible] 1981 [illegible] 1977 [illegible] 3 [illegible] 71 [illegible] (%41) 387 [illegible] %25 [illegible] .(Planes *et al.*, 1986) [illegible] .(Caffarena *et al.*, 1993) [illegible] 12 [illegible] 1989 [illegible] 1994 [illegible] 1993 – 1992 [illegible] 55 [illegible] 22 [illegible] .(Caffarena *et al.*, 1993) 1988 – 1987 [illegible] 6 [illegible] 1970 – 1962

[illegible] 1969 [illegible] .(Schachter *et al.*, 1969) [illegible] .(Regan *et al.*, 1979) [illegible] 10 [illegible] .(Hadley *et al.*, 1992) [illegible] .(Villemonteix *et al.*, 1990) [illegible]

[illegible] 130 [illegible]

[illegible] fringillids [illegible]
[illegible] 1987 [illegible] 1960 [illegible] 20 [illegible]
[illegible] .(Grimes *et al.*, 1991) [illegible]
[illegible] 250) pet [illegible] 287 [illegible] %20 [illegible]
[illegible] .(Schwartz *et al.*, 1982) [illegible]
[illegible] 77 [illegible] (%24.7) 19 [illegible]
[illegible] .(Hirai *et al.*, 1983) passerines [illegible] (%26.1) 12 [illegible]
[illegible] 716 [illegible] (%0.8) 6 [illegible]
Fukushi *et*) [illegible] 658 [illegible] %37 [illegible]
[illegible] .(*al.*, 1983
[illegible] *C. pecorum* [illegible]
[illegible]
[illegible] placentopathy [illegible]
[illegible] encephalomyelitis [illegible]
[illegible]
[illegible] .(Timoney *et al.*, 1988) [illegible]
[illegible] zoontic [illegible]
[illegible] 1991 – 1987 [illegible]
[illegible] %28 [illegible] %30.7 [illegible]
[illegible] .(Leonard *et al.*, 1993) %8.6 [illegible]
[illegible]
feral [illegible] 753 [illegible] %30
[illegible] 3 [illegible] 2 [illegible]
[illegible] 22 [illegible] 10 [illegible]
.(Wills *et al.*, 1988)

[illegible] 2 – 1 [illegible] 1986 [illegible] %69 [illegible] %83 [illegible] %88 [illegible] %80 [illegible] %91 [illegible] (Hedberg *et al.,* 1989) [illegible] %58 [illegible] 10 – 7 [illegible] patches [illegible] 50 [illegible] delirium [illegible] (Hadley *et al.,* 1992).

[illegible] 14 – 10 [illegible] 8 [illegible]

[illegible] %1 [illegible] .(Benenson, 1990) [illegible]

[illegible] parakeets [illegible] hyperemic [illegible] epicarditis [illegible]

[illegible] C. pecorum [illegible] parenteral [illegible] .(Johnson and Grimes, 1983) [illegible] macaw [illegible]

(*Ara araraeina*)

.(Lipman *et al.,* 1994) cloaca

C. pecorum

.(Schachter, 1989)

.(Schachter and Dawson, 1979)

1.000

(coprophagy

(Grimes, 1978)

microprocedure

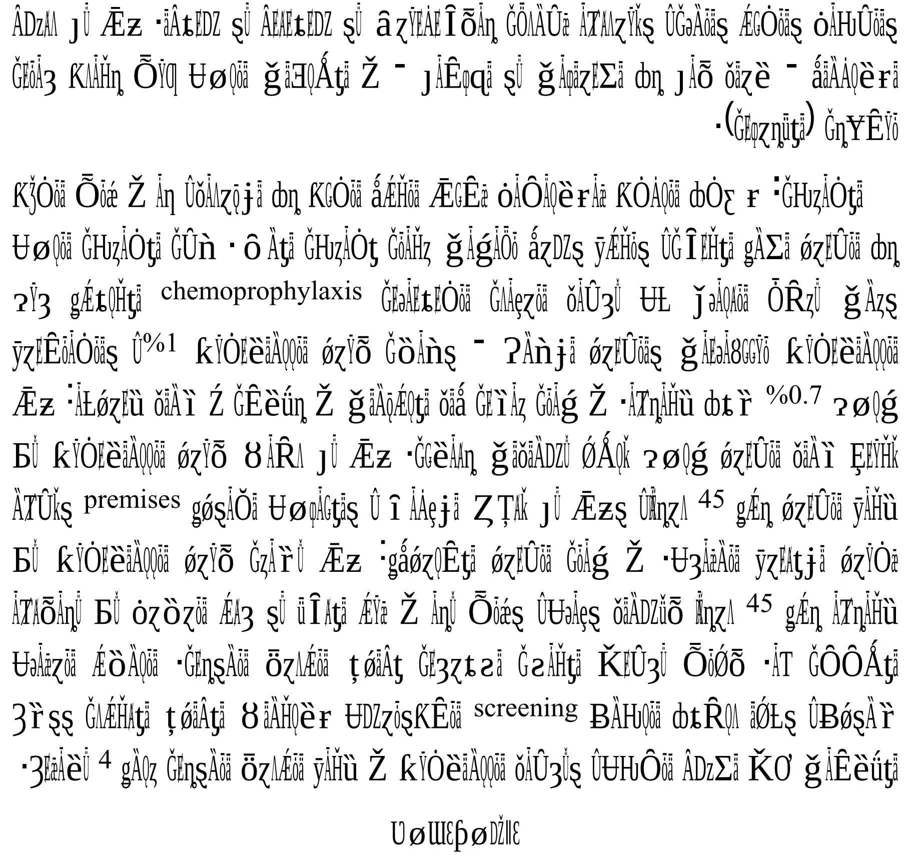
(V/V) %5

.(Grimes and Wyrick, 1991)

.(Grimes, 1989)

10

.(Anderson, 1991a)



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ZOONOTIC TYPHUS CAUSED BY *RICKETTSIA PROWAZEKII*

ICD-10 A75.0

ICD-10 A75.0 Epidemic louse-borne typhus fever due to *Rickettsia Prowazekii*

.T. exanthematicus

.R. prowazekii

.Glawcomys volans volans

.(Bozeman *et al.,* 1975)

McDade *et*) .(*al.,* 1980

.1979 1976

(%85.7) 1.349 .1.575

(%14) 226

5 (%3.5) 8

(McDade *et al.*, 1986) ... 7 ... 1980/1 ... 1977/6 ... Duma *et al.*,) ... (1981.

1972 ... 557 ... %54.2 ... 1977 ... (Sonenshine *et al.*, 1978).

(Duma *et al.*, 1981) ... 3 – 2 ... 4 ... McDade *et*) ... (*al.*, 1980.

Bozeman *et al.*,) ... 3 – 2 ... (1981.

... 1950 ... 1922 ... Rescrudescent ...

[illegible] .(McDade *et al.,* 1980) [illegible]

Gloucomys volans volans [illegible] cohahitation [illegible] *Neohaematopinus* sciuropteri *Neohaematopinus* sciuropteri [illegible] *Orchopeas howardii* [illegible] .(Bozeman *et al.,* 1981) [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

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الجزء الثانــي

الأمـراض الفيـروسيـة

ARGENTINE HEMORRHAGIC FEVER

ICD-10 A96.0
ICD-10 A96.0 Junín hemorrhagic fever

Stubble ... O'Higgins ...

... genome ... Junín ... Arenavirus ... segmented ... virions ... Arenaviridae 110 – 130 ... choriomeningitis ... 300 ... ribosomes ...

... Bear ... Amapari ... Allpahuayo ... Junín ... Guanarito ... Flexal ... Cupixi ... Canyon ... Paraná ... Oliveros ... Machupo ... Latino ... Tamiami ... Tacaribe ... Sabiá ... Pirital ... Pichindé ... (Charrel *et al*., 2002) Whitewater Arroyo ... (Weissenbacher and Damonte, 1983) ...

(Johnson, 1981)

(pampa) 120.000 2

Akodon azarae 449 2 1953 (Weissenbacher *et al*., 1983a)

1958 1954 18.000 (1980 – 1958) 23 %15 %10

1964 (1980 1980 161 1977 989 302 1983 – 1981 1991 727 1990 (1983 – 1981 1992 154

(1992 ... 14 ... %12 ... neutralizing ... %11.6 ... %4.4 ... %7.6) ... %1.9 ... %7.9) ...
.(Weissenbacher *et al.*, 1983b)

... 16 – 10 ... (vascularization ...) ... .cylindruria ... 8 – 5 ... unsteady ... hypotonia ... %75) ... .osteotendinous hyporeflexia ...

... 6 ...

[illegible] melena [illegible] tonic-clonic [illegible] %60 [illegible]

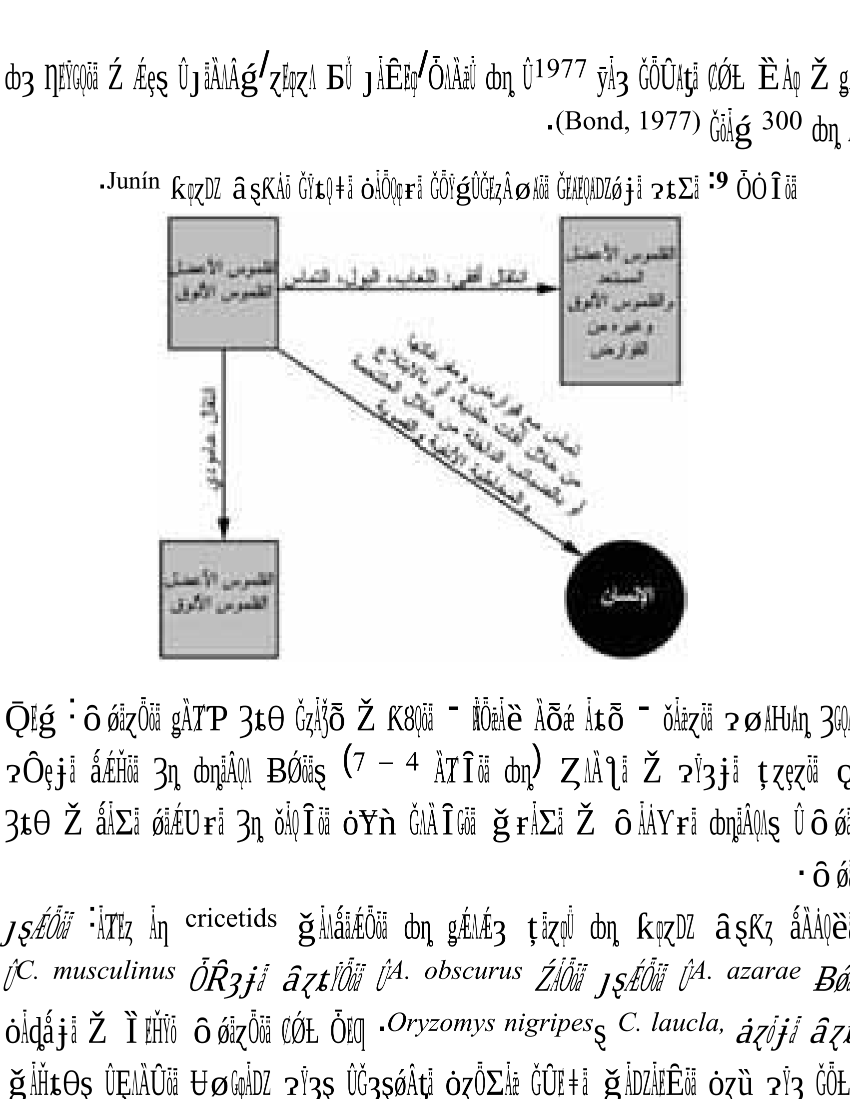
[illegible] 130 [illegible] (%9) 12 [illegible] (1974 – 1971 [illegible] .(Carballal *et al.*, 1991) %3 [illegible] %20 – %15 [illegible]

[illegible] :cricetid [illegible] *Akodon* [illegible] *C. laucha* [illegible] *Calomys musculinus* [illegible] *azarae* [illegible] .(Sabattini *et al.*, 1977) [illegible] *Akodon* [illegible] .(Weissenbacher *et al.*, 1983) [illegible]

[illegible] :(9 [illegible] (%35) [illegible] 3075 [illegible] 1974 [illegible] 1965 [illegible] 8.728 [illegible] 3.075 [illegible] (1 :4) [illegible]

[illegible] 1977 [illegible] 300 [illegible] .(Bond, 1977)

[illegible] :9 [illegible] .Junín



[illegible] (7 – 4 [illegible]

[illegible] cricetids [illegible] *A. azarae* [illegible] *A. obscurus* [illegible] *C. musculinus* [illegible] *C. laucla,* [illegible] *Oryzomys nigripes*. [illegible] 55 [illegible]

[illegible] *C. callosis* [illegible]

[illegible] (Sabattini *et al.*, 1977) [illegible]

[illegible] cricetid [illegible]

[illegible] (%76) [illegible]

[illegible] (Mills *et al.*, 1992) [illegible]

[illegible] 4 [illegible]

[illegible] *Akodon* [illegible] 40

(Sabattini *et al.*, 1977) [illegible]

[illegible] Villefañe *et al.*,) *Calomys* [illegible] (1977

[illegible]

[illegible] .(Weiassenbacher *et al.*, 1983 [illegible] Kravetz *et al.*, 1981) [illegible]

[illegible] *Calomys* [illegible] litter [illegible]

[illegible] %60 [illegible] Presumptive [illegible] leukoplaquetopenia [illegible] .(Carballal *et al.*, 1991) [illegible] CD8+ [illegible] CD4+ [illegible] (virologic [illegible]) [illegible] 1965 [illegible]

[illegible] 1974 – 1965 [illegible] %64 [illegible] Vero [illegible] cytopathogenic [illegible] (Lascano *et al.*, 1981) [illegible] 8 – 2 [illegible] 4 – 3 [illegible] (Samailovich *et al.*, 1983) [illegible] 14 – 1 [illegible] 50 [illegible] %96 [illegible] %88 [illegible] (Damilano *et al.*, 1983) [illegible] %30 [illegible] G [illegible] M [illegible] (Carballal *et al.*, 1991) Lozano *et al.*, 1993;) [illegible] Reverse- transciption .(Lozano *et al.*, 1995

[illegible]

inactivate

Candid #1 XJO XJC13

636 XJC13

9 – 7

Cebus %90

(marmoset) neurovirulence

Callithrix jacchus

(Weissembacher and Damonte, 1983)

Candid #1

Berrera Oro, J., 1993; March 1986; Barrera Oro)

(and McKee, 1991; McKee *et al*., 1993

preclinical

300 immunogenicity

1990 – 1988

41 6.500

100.488

(W.H.O, 1993)

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BOVINE PAPULAR STOMATITIS

ICD-10 B08.8

ICD-10 B08.8 Other specified viral infections characterized by skin and mucous membrane lesions

.proliferating ... granular ...

Poxviridae ... *Parapoxvirus* ...

virion ... (pseudocowpox ... = ... 215 – 207 x ... 150 – 125 ...

.(Timoney *et al*., 1988) ...

... 19 ... 1972 ... 1953 ... .(Schnurrenberger *et al*., 1980) ...

.(Bowman *et al*., 1981) ...

(Aguilar-Setien *et al*., 1980) ...

[illegible]

[illegible] erosive [illegible] %5 [illegible] 120 [illegible] 31 [illegible] (Aguilar-Setien *et al.*, 1980) [illegible] (Bowman *et al.*, 1981) [illegible] vesicular [illegible]

[illegible] 8 – 3 [illegible] 8 – 3 [illegible] verrucous [illegible] 3 [illegible]

[illegible] 1960 [illegible]

4 – 2

cytopathic

(Tripathy *et al*., 1981)

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BRAZILIAN HEMORRHAGIC FEVER

ICD-10 A 96.8

ICD-10 A96.8 Other arenaviral hemorrhagic fevers

Sabiá Arenaviridae *Arenavirus* Tacaribe Pichindé Machupo Junín Guanarito 250 Tacaribe %65 Divergence

1994

.ultracentrifuge

index case 12 25

40-38 39

Lisieux, T., M. Coimbra, E.S. Nassar, *et al.* New arenavirus isolated in Brazil. *Lancet* 343:391–392, 1994.

CALIFORNIA ENCEPHALITIS

ICD-10 A83.5

La Crosse

14

10

Bunyaviridae

Bunyavirus

100 – 90

Jamestown Canyon

(CDC, 1982) 1980

1945

McFarlane *et*) .(Snowshoe

Tahyna .(*al*., 1982

Inkoo

.(White, 1989)

arboviruses

:1970 – 1960

509

.(CDC, 1981) 109 :1978

29 :1992 .(Work and Work, 1991)

.(CDC, 1993) 1964

Johnson,) 130 – 60

%6 .(1990

%60

50 %75

%60 %5

103 24

15

.(Work and Work, 1991)

.(Johnson, 1990)

.Jamestown canyon

.(CDC, 1982)

10

الإنسان

[illegible] *Tamias striatus* ([illegible]) chipmunk [illegible] .(Thompson, 1981)

[illegible] :(10 [illegible]) [illegible] *Aedes triseriatus* [illegible] (*T. striatus, Sciurus carolinenis S. niger*) [illegible] .(*Sylvilagus floridans*) [illegible] (*S. carolinensis*) [illegible] (*T. striatus*) [illegible] 5 – 2 [illegible] 17 – 15 [illegible]

[illegible] F1 [illegible]

[illegible] diapause [illegible]

[illegible] (*Vulpus fulva*) [illegible]
.(Amundon and Yuill, 1981) [illegible]

.*Aedes albopictus* [illegible] 4 − 1 [illegible] 1985 [illegible] .(Cully *et al*., 1992) [illegible]

[illegible] *Aedes* [illegible] (*A. capius* [illegible] *A. vexans* [illegible] Jamestown canyon [illegible] .*A. communis* [illegible] *Culieseta inornata* [illegible]

[illegible] (CDC, 1982) (*Odocoileus virginianus*) [illegible] *Lepus americanus* [illegible] (*Alces alces Americana*) [illegible] McLean *et al*., 1975; McFarlane *et al*.,) *A. Canadensis* [illegible] (1982 [illegible] (McLean *et al*., 1975)

[illegible] venereal [illegible] (Amundson *et al*., 1981) [illegible]

[illegible] 4 [illegible] significant [illegible] (Beaty *et al*., 1982) [illegible] M [illegible]

et al.,) ... (1985

Amundson, T.E., T.M. Yuill. Natural La Crosse virus infection in the red fox (*Vulpes fulva*), gray fox (*Urocyon cinereoargenteus*), raccoon (*Procyon lotor*) and opossum (*Didelphis virginiana*). *Am J Trop Med Hyg* 30:706–714, 1981.

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CHIKUNGUNYA VIRUS DISEASE ƑĭďŊǮďŊ|ĭʅ ƧŊƥĭʒ ƀƐƣ

ICD-10 A92.0

·ĞĔʐÂøÀöä ÀĔφʐ8φʐÒĔì ʔƥ ÛÀĔφʐ8φʐÒĔì ʔƥ ˙ğÀʐåäÀʈä

ÈÀDZ БÜ ɄƭϘÀ ÛƙÖä ɃşÀφø ȧÀÛöä åÀÀŋ âşƘʐ ʐŁş ÛÀĔφʐ8φʐÒĔì âşƘʐ ˙ğÀĔGGÊöä ğÀĔŸÔÀʈÀæ ĞöʐÕÀʈä ğÀèşĶÀöä ȸŋ A Ğʒʐʈ Öä) *Alphavirus* *ĞÀşÀÀöĵä ĞèşĶÀöä*

Togaviridae

Nyong[1] – Mayaro

60 – 50 Semliki[2]

(Brighton *et al*., 1983) 1977 1976 1975

1969

5

Tomori *et al*.,)

(1975

dormancy

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[1] (Johnson *et al*., 1981) 1978

1963 – 1959

funestus

[2]

[illegible] (1986) [illegible] 1984 [illegible] 1970 [illegible] 1.548 [illegible] (Thein *et al.*, 1992) [illegible] 110 [illegible] 86 [illegible] %33 [illegible] (Tesh *et al.*, 1975) [illegible] 477 [illegible] %14.3 [illegible] (Adesina and Odelola, 1991) [illegible] (Zhang *et al.*, 1991) [illegible] 273 [illegible] %10 [illegible]

[illegible] (*Papio ursinus*) [illegible] (*Cercopithecus aethiops*) [illegible] (McIntosh, 1970) [illegible] %50 [illegible] (Kaschula *et al.*, 1978) [illegible] (*Colobus abyssinicus*) [illegible] 220 [illegible] 2.3% [illegible] (*P. dogueri*) [illegible] (Zhang *et al.*, 1991) [illegible]

[illegible] 1955 [illegible] 7 – 4 [illegible] (%80 [illegible] %60) [illegible] 7 [illegible] 3 [illegible] (%9) [illegible] (%52) [illegible] (Thein *et al.*, 1992) (%8) [illegible] chikungunya [illegible] (Walking hunchbacked [illegible] 5-3 [illegible] (Kennedy *et al.*, 1980) [illegible] (Brighton *et al.*, 1983) [illegible] (Tesh, 1982) [illegible]

[illegible]

[illegible] *furcifer-taylor* [illegible] *Aedes africanus* [illegible] *P. ursinus* [illegible] (McIntosh, 1970)

[illegible] (1969 – 1964) [illegible] 5 [illegible]

[illegible] (%54) [illegible]
[illegible]
[illegible] 1964 [illegible] 4 [illegible]
[illegible]
[illegible] sentinel [illegible]
[illegible]
[illegible] ecosystem
[illegible]
[illegible] 1981 [illegible] 1977 [illegible] .(McIntosh, 1970) [illegible]
[illegible]
[illegible] 1976 [illegible] *furcifer* [illegible]
[illegible] 11.393 [illegible]
[illegible]
[illegible] 13.029
[illegible] .(Jupp and McIntash, 1990)
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
Halstead) [illegible]
[illegible] *Rousettus leshenaulti* [illegible] .(1981
Culex taeni- [illegible] *albopictus* [illegible]
.(Zhang *et al.*, 1991) [illegible] *orhynchus*

[illegible] VERO [illegible] (Thein *et al*., 1992) [illegible] nested [illegible] PCR [illegible]

[illegible] (Filipe and Pinto, 1973) [illegible]

[illegible] (Filipe and Pinto, 1973) [illegible] (Turell and Malinoski, 1992) [illegible]

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COLORADO TICK FEVER ǋǫƐƥǋǁǋǀ ǫƐƥƨ ĂǅƟ

ICD-10 A93.2

·òÀǴƨä ɁƤ ˙ȣåäÀţä

ȸŋ Ȥöüǫ Ûƙęǰù şæ ƙÖä ɃşÀǿø âşƘ Ûşåäǿȥǐȥõ åäÀę ɁƤ âşƘ ˙ğÀǼǴÊöä ǦÀȥÀöä ğÀèşKÀöä ǦŸÔȥ Û*Coltivirus* *ǦÀȲţä ǦèşKÀöä* ÈǅǄ БǓ ɄƭǫǁȘ (ǦȥǼì) ǦĤÛę 12

[illegible] 12 [illegible] 80 – 60 [illegible] 10 [illegible] *Orbivirus* [illegible] Eyach [illegible] *Ixodes ricinus* [illegible]

[illegible] 11 [illegible] *Dermacentor andersoni* [illegible]

[illegible] 400 – 200 [illegible] 174 [illegible] (Mclean *et al*., 1981) [illegible] (Artsob and Spence, 1979) [illegible]

[illegible] 6 – 3 [illegible] %10 [illegible] %50 [illegible] 4 [illegible] (Emmons, 1988) [illegible]

4 – 3 ... 10 ... %10 ... (Emmons, 1988)

... 11 ...

... 11 ...

Eutamius minimus ... (Citellus) lateralis ... Spermophilus ...

Eutamias amo- ... Citellus colombianus ... enus

%6 %5

20 15 (Bowen *et al.*, 1981)

Emmons,) Overwinter *S. lateralis*

(1966

lifespan

Porcupine

(Emmons, 1988)

Lepus) Jackrabbit

Sciurus griseus (*californius*

(Lane *et al.*, 1982)

Lepus americans

1.300

%40 %14

110

.(CDC, 1975a)

Andrewes, C.H., H.G. Pereira. *Viruses of Vertebrates*, 3rd ed. Baltimore: Williams & Wilkins; 1972.

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United States of America, Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). Colorado tick fever: Maryland. *MMWR Morb Mortal Wkly Rep* 24:219, 1975b.

CONTAGIOUS ECTHYMA ƕĭɋyǅǁɛ ƕǅĭƙǀȖɛ

ǌƥɊǕɛ ƕĭƥɋɯǁɛ ƕƨǋƥĭƻǁɛ ǌǋɛɋY ICD-10 B08.0
ICD-10 B08.0 Other orthopoxvirus infections

ɃÃǯǦöä ǈÀöä āÀǮǪöä ÛɃǼȟţ ɃÃǯǦöä ǼŸƨä āÀǮǪöä Û^Orf^ ȣøɉä âşƘ ǒäǻ ˙ğÀɀǻäÃţä ·ɃǼȟţ

ǦŸÊÔɀ) *Parapoxvirus ǦǷǻøǼƨä Ǧèşƙǻöä* ÈǺǅ ȸɳ ÛƙŎä ɃşÀǻ âşƘ ˙ğǼǦÊöä ǼŐʒ ǼǦÊǩ ɄøǪöä ğÀèşƘÀöä ǺȒǺǕ ȸȶȒǪǩ ɄøǪöäş Û(Poxviridae ǦǺøǼƨä ğÀèşƘÀöä ÈǺŐǺ ·ɃÃŐǦöä ɃÃǯǦöä ǈÀöä āÀǮǪöäş (āǽÒöä ɃÃŐǦöä ɃøǼƨä) milker's nodule ƙǽŸΣä ƘǦõ ŐÒÎǽ ¢ǅɀǪöä ɃøÀǮşş ǦǼǼǦöä ȣşÃŢŸõ ǺǼǅ ȳşÀŐɳ ɀȴş ·ÃǪɳ ɀǻǻ 260 × 160 ɉɀǺƘÀöä .epitheliotropic

ğÀɼɀöä Ž ǼǅɀǺ ·ȳÀɖɉä ɄøǽÃǩ ɄøǪöä ɉǻǼŸǦöä Őõ Ž ôÃţä ǼǅɀǺ ˙ŽäÃȣƨä ţàɀǪöä

1975 ... 143 ... 1979 ...

(Robinson and Petersen, 1981) ... 231 ... 18 ... %1.4 ...

Robinson and Petersen, 1983) ... 18 ...

.(Timoney *et al.*, 1988 ...

... enzootic ...

... 3 ... 6.300.000 ... %0.5 ...

... extrapoltion ... %2.2 ...

.(Robinson, 1983) ... 1.250.000 ...

... 13 ... 4.350 ... 1.150 ...

... 240 ... 8.823 ... 3.492 ... 1985 ...

... 1986 ...

.(Munz *et al.*, 1991) ... (%1.1)

... 7 – 3 ...

[illegible] Johannessen *et al.*,) [illegible] (1975; Leavell *et al.*, 1968 [illegible]

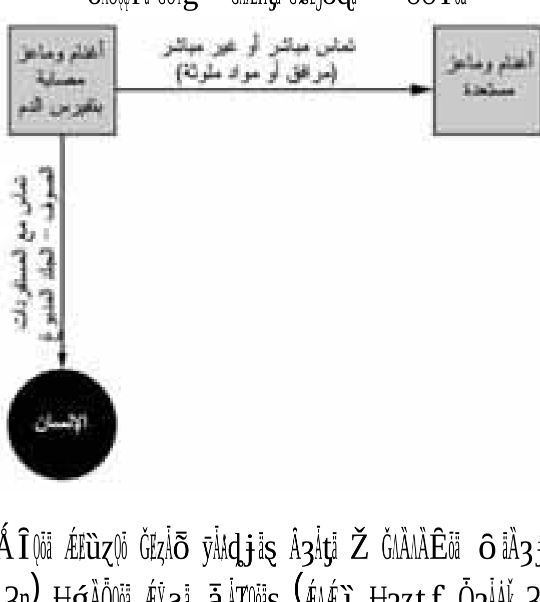
[illegible]

[illegible] *Cochliomyia hominivorax* [illegible]

[illegible]

(Robinson, 1983)

12



(Torfason and Gunadottir, 2002)

pulverized

Robinson and)

(Balassu, 1981

(Mayr *et al.*, 1981)

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COWPOX

ICD-10 B08.0

ICD-10 B08.0 Other orthopoxvirus infections

(vaccinia.

Orthpoxvirus ... Poxviridae ... 100 × 240 × 300 ...

[illegible] (variola [illegible]) smallpox [illegible] 40° [illegible] (Baxby *et al.*, 1979) [illegible] (Naidoo *et al.*, 1992) [illegible]

[illegible] Amer *et al.*,) [illegible] Odend'hal,) [illegible] (2001 [illegible] (1983

[illegible] enzootic [illegible] 7 [illegible] *Glethrionomys* [illegible] 1.076 [illegible] (*Apodemus sylvaticus* [illegible]) [illegible] (*glareolus* [illegible] Hazel *et al.*, 2000; Chantrey *et al.*,) [illegible] 36 [illegible] 17 [illegible] (1999

(1977–1979)

12 … 1981 – 1969 … 13 … 20 …

23 … 1993 – 1982

(Baxby, 1994)

Blackford *et*

(Amer *et al.*, 2001 … *al.*, 1993).

30 …

(Bennett *et al.*, 1990)

200 … %4

520 … 6

%10.1 … 217

(Tryland *et al.*, 1998).

1974 – 1973

(Marennaikova *et al.*, 1977).

%42 … pumas

%30

Marennaikova

(*et al.*, 1978

fulvous … (*Rhombomys opimus*)

[illegible] (*Citellus fulvus* [illegible] (elephantpox [illegible]) [illegible] .(Baxby *et al*., 1982) [illegible] 5 [illegible] 303 [illegible] 218 [illegible] 202 [illegible] 67 [illegible] 277 [illegible] 38 [illegible] 13 [illegible] 106 [illegible] 61 [illegible] .(Jacoby, 1992) [illegible]

[illegible] 5 [illegible] 6 – 3 [illegible] Tripathy *et al*.,) [illegible] .(1981

[illegible] 18 [illegible] spikiy [illegible] .(Eis-Hubinger *et al*., 1990) [illegible]

[illegible]

[illegible] Baxby *et al*., 1982; Marennikova *et*) [illegible] (*al*., 1977 [illegible] 7 – 5 .(Hoare *et al*., 1984) [illegible] 8 – 6 [illegible] 8 [illegible] 3 – 2 [illegible] (*Microtus oeconomus* [illegible]) [illegible] 5 [illegible] .(Zhukova *et al*., 1992) [illegible]

[illegible] Hazel *et al*.,) [illegible] .(2000 [illegible] (Wolfs *et al*., 2002) [illegible] pumas [illegible]

[illegible]

[illegible] Baxby *et al*.,) [illegible] Schupp *et al*., 2001; Wiencke *et al*.,) [illegible] (1979 .(2000

[illegible] Munz *et*) [illegible] MVA [illegible] (*al*., 1993

[illegible]

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Addendum [illegible]

BUFFALOPOX [illegible]

[illegible] (*Bubalus Bubalis*) [illegible] buffalopox virus [illegible] 650 [illegible] %3.8 [illegible]

[illegible]

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[illegible]
CRIMEAN-CONGO HEMORRHAGIC FEVER
ICD-10 A 98.0

[illegible]

[illegible] 105 – 85 [illegible] *Nairovirus* [illegible]

[illegible]

[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]

[illegible] 200 – 92 [illegible] 1944 [illegible] .1945 [illegible] 100 [illegible] .1963 [illegible] 44 [illegible] 1963 [illegible] 1953 [illegible] 18 [illegible] 104 [illegible] 1969 [illegible] 1963 [illegible] 323 [illegible] .1968 [illegible] %16 [illegible] 131 [illegible] %0.7 [illegible] 1965 – 1953 [illegible] 717 [illegible] 1972 – 1968 [illegible] 121 [illegible] %17 [illegible] .(Hoogstraal, 1979) [illegible] %9 [illegible] .(yen *et al.*, 1985) [illegible] %80 [illegible] 1965 [illegible] 135 [illegible] 16 [illegible] G [illegible] 99 [illegible] %36 [illegible] .(Gonzalez *et al.*, 1990)

[illegible] (Fisher-Hoch *et al*., 1992) [illegible]

[illegible] *Hyaomma maeginotum* complex [illegible]

[illegible]

[illegible]

[illegible] 21 [illegible] 5 [illegible] 70 [illegible]

[illegible] 11 [illegible] 5 [illegible] 49 [illegible] 7 [illegible] .55 [illegible]

960 (Burt *et al.*, 1993) 7 – 3 5 – 3 14 1.219 (Gonzalez *et al.*,1990) %43 %4.9

12 – 5 8

asthenia %30

Swanepoel *et al.*,) 31 11

[illegible] .(1987 [illegible]

[illegible] .(WHO, 1985) [illegible]

[illegible]

[illegible] 19 [illegible] .foothill biotopes (WHO 1985) [illegible] 9 [illegible] *Hyalomma* [illegible] *Dermacentor* [illegible] .*Boophilus* [illegible] *Rhipicephalus* [illegible] hares [illegible] .(Hoogstraal, 1979) [illegible]

[illegible]

rossicus

Lepus europaeus – L. capensis

Erinaceus albiventris – Heniechinus auritus ,

Hoogstraal,)

.(1979

episodes

flesh

.(Fisher-Hoch *et al*., 1992)

.(Hoogstraal, 1979)

(%0.5) 12 ... 1.253 ... (%1.2) 15

(*Impalatum* ...) ... 2.049

.(Gordon *et al.*, 1993)

Vero ... CER

radial ... reverse transcription

.(Donats *et al.*, 1982)

.(Burt, 1993) global ... M

contagion

ÙøШεþøDŽlΙε

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DENGUE [illegible]

[illegible] A91 [illegible] ICD-10 A90

ICD-10 A90 Dengue fever (classical dengue); A91 Dengue hemorrhagic fever

Flavivirus [illegible] (4 – 1) [illegible] Flaviviridae [illegible]

[illegible] *Aedes aegypti* [illegible] *Aedes albopictus* [illegible] (16) [illegible] (4) [illegible] *niveus* [illegible]

(1989)

(1963)

DEN-2 (1969) DEN-3

DEN-1 (1977)

60

DEN-4 (1981) (Figueroa *et al.*, 1982)

PAHO,)

(1982

1982 1981 1983

50

(PAHO, 1984)

1986 DEN-1

DEN-1

(PAHO, 1993) (1993) (1988) (1987)

134.000

1980 – 1987

(Figuroa *et al.*, 1982)

1916 %45

DEN-2

(Fagbami *et al.*, 1977)

[illegible]

[illegible] *niveus* [illegible] WHO,) [illegible] .(Varma, 1989) [illegible] 600 [illegible] %26.8 [illegible] .(1985 [illegible] .(Rudnick, 1966a) [illegible] %8 Monath *et al.*, 1974;) [illegible] .(Fagbami *et al.*, 1977

[illegible] 8 – 5 [illegible] retroocular [illegible] 7 – 5 [illegible] Benenson, 1990; Tesh,) [illegible] .(1982

[illegible] 12 [illegible]

1981

344.203

9.203 1981

159 1.109

DEN-2

((Kourí *et al.*, 1983; Cuzmán *et al.*, 1984)

1983 1992 – 1981

Aruba

.(PAHO, 1993)

expander

.(Benenson, 1990)

[illegible] 6 – 5 [illegible] 10 [illegible] *albopictus* [illegible] *scutellaris* [illegible]

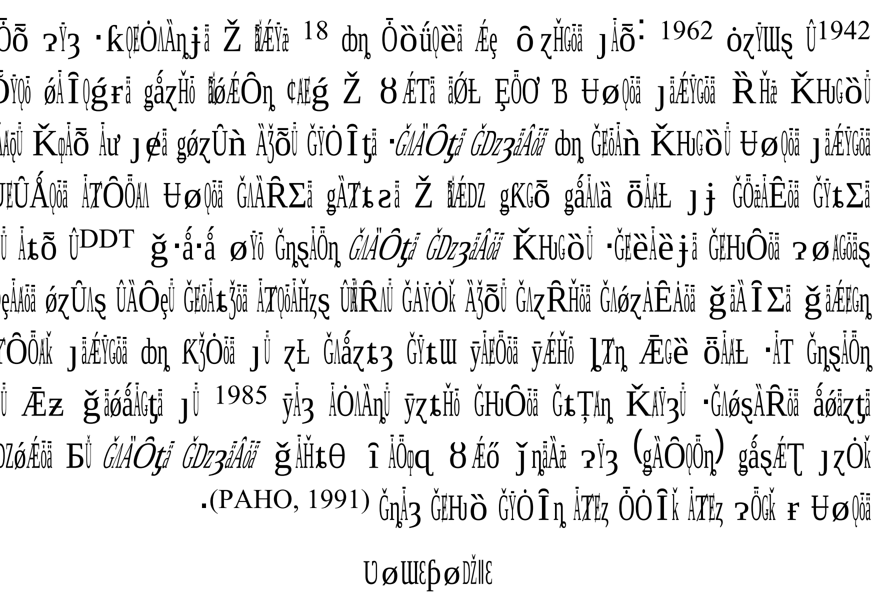
[illegible] (WHO, 1985) [illegible] 2 [illegible] 1 [illegible] *niveus* [illegible]

DEN-2

(Varma, 1989)

Scutellaris

G M



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DISEASES CAUSED BY HANTAVIRUSES

ICD-10 J12.8 **ICD-10A 98.5**

ICD-10 A98.6 Hemorrhagic fever with renal syndrome; ICD-10 J12.8 Other viral peneumonia

Hantaan (epidemic nephropathy, nephropathia epidemica)

[illegible] *Hantavirus* [illegible] 100 – 90 [illegible] *Bunyaviridae* [illegible] 3 [illegible] bilayered [illegible] helicoidal nucleocapsids [illegible] S [illegible] M [illegible] L [illegible] 3 [illegible] glycoproteins [illegible] (1 [illegible]) [illegible] prototype [illegible] (1) [illegible]

[illegible] (1 [illegible]) [illegible]

[illegible] 1950 [illegible] 30.00 [illegible] 1953 [illegible] %33 [illegible] %8 – %6 [illegible] (Traub and Wisseman, 1978).

[illegible] (Schmaljohn and Hjelle, 1997 [illegible] Lee, 1996) [illegible] 1992 – 1978 [illegible] 2.706 [illegible] %15 [illegible] %10 [illegible]

63 300000 13 45

200.000 – 150.000 (Schmaljohn and Hjelle, 1997 Lee, 1996) 13 0.03 18 90.936 (Cohen, 1982) 100.000 %7 1985 103.778 1984 1972 1960 100 1976 (Sugiyama *et al.*, 1984) 100 (Umenai *et al.*, 1981) (*Apodemus speciosus*) 2.791 (Umenai *et al.*, 1981) (*Microtus montebelli*) %73.4 *Rattus nervegicus* %15.2 6 (Arikawa *et al.*, 1994) 1978 – 65.906 1992 puumala %2 %1 88 9 33 1990 1992 (Clement *et al.*, 1994) %80 1993

[illegible] [1] [illegible]

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible] Apodemus agrarius	[illegible]	[illegible]
[illegible]	[illegible] A. flavicollis [illegible] [illegible] Apodemus agrarius	[illegible]	[illegible]
[illegible]	[illegible] Rattus norvegicus	[illegible]	[illegible]
[illegible]	[illegible] Clethrionomys glareolus	[illegible]	[illegible]
[illegible]	[illegible] Peromyscus maniculatus	[illegible]	[illegible]
[illegible]	[illegible] Peromyscus [illegible] leucopus	[illegible]	[illegible]
[illegible]	(sigmodon hispidus) [illegible]	[illegible]	[illegible]
[illegible]	(Oryzomys palutris) [illegible]	[illegible]	(1) [illegible]
[illegible]	(3) [illegible] Oligoryzmys longicaudatus	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Oligoryzmys chacoensis	[illegible]	[illegible]
[illegible]	Oligoryzmys fulvescens	[illegible]	[illegible]
[illegible]	Oligoryzmys flavescens	[illegible]	[illegible]

[illegible]	*Calomys* [illegible] *laucha*	[illegible]	[illegible]
[illegible]	[3] [illegible] *Oligoryzmys longicaudatus*	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	HU39694
[illegible]	*Calomys* [illegible] *laucha*	[illegible]	[2, 1] [illegible]

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Source: Adapted from Schmaljohn, C., B. Hjelle. Hantaviruses: A global disease problem. *Emerg Infect Dis* 3(2):95–104, 1997. [Table 1].

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C. glareolus [illegible] 210 [illegible] 44 [illegible] (Verhagen *et al.,* 1986) [illegible] 1.000 [illegible] 0.777 [illegible] 2.858 [illegible] %40 [illegible] 39 – 20 [illegible] 41 [illegible] (Niklasson *et al.*, 1987) [illegible] 60 [illegible] %15 [illegible] 176 [illegible] *C. glareolus* [illegible] 22 [illegible] 181 [illegible] (Niklasson and Le Duc, 1987).

[illegible] Hantaan [illegible] Dobrava – Belgrade [illegible] *A. flavicollis* [illegible] Avsic – zupance) [illegible] %20 [illegible] *A. agravius* [illegible] (*et al.*, 1992; Taller *et al.*, 1993 [illegible] (Sibold *et al.*, 2000) [illegible] (Nemirov *et al.*, 1999) [illegible]

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310	74	52	76	61	47	–	–	–	–	[illegible]
11	5	3	1	1	1	–	–	–	–	[illegible]
167	69	54	26	11	–	3	1	–	3	[illegible]
204	78	31	26	35	30	3	1	–	–	[illegible]
91	27	15	4	5	4	5	15	16	–	[illegible]
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Schmaljohn C. B Hjelle. Hantaviruses :A global disease problem. *Emerg Infect* :[illegible] *.Dis* 3(2):95–104, 1997

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EASTERN EQUINE ENCEPHALITIS

ICD-10 A 83.2

(encephalomyelitis

Alphavirus … A … 60 – 50 … (*Togaviridae* … variants … mapping … (Weaver *et al.*, 1994) … 1.000 … 6 …

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[illegible] 2 – 1 [illegible] 50 [illegible] 15 [illegible] 32 [illegible] .1949 – 1984 [illegible] 3 – 2 [illegible] 827 [illegible] 69 [illegible] 1959 [illegible] 1.600 [illegible] 32 [illegible] 16 [illegible]

[illegible] pheasant [illegible] 1971 [illegible] 1.551 [illegible] 670 [illegible] 1971 [illegible] .(Maness andCalisher, 1981) [illegible] 26.468 [illegible] 1970 [illegible] 1956 [illegible] 2.620 [illegible] 201 [illegible] 605 [illegible] 1947 [illegible] .(Dietz *et al*., 1980) [illegible] 11.927 [illegible]

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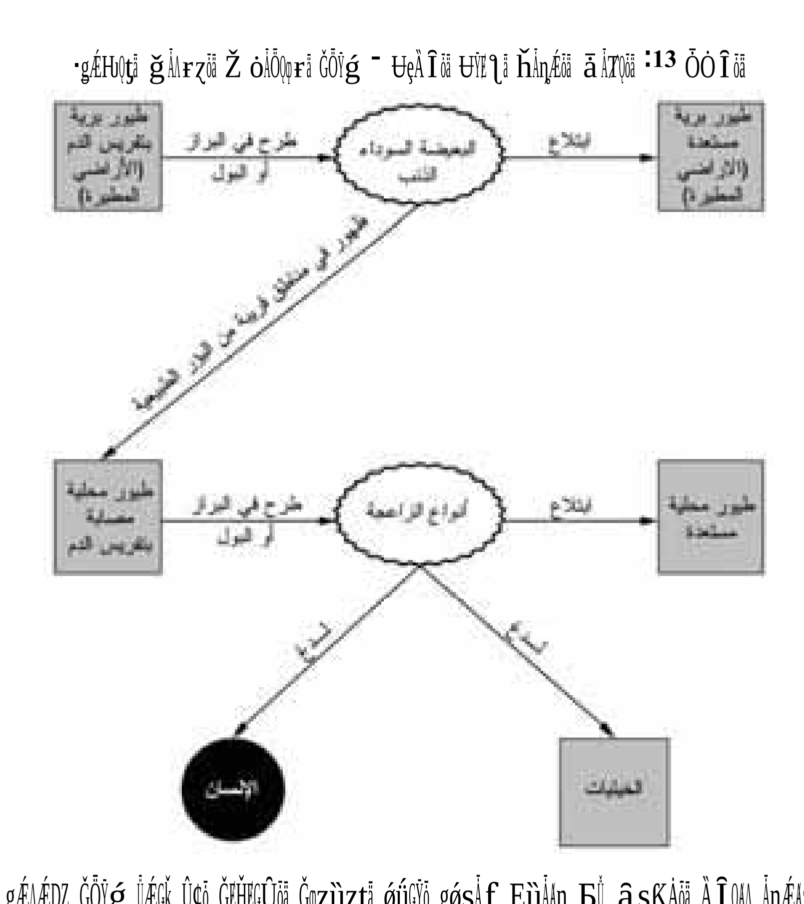
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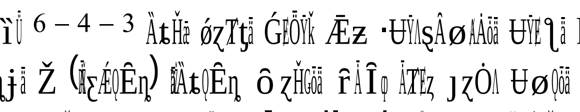
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(Dietz *et al*., 1980)



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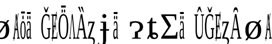
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EBOLA DISEASE

ICD-10 A98.4 Ebola virus disease ICD-10 A 98.4



Filoriridae Filovirus Marburg 80 nucleocapsid 1.000 – 800 capsomer Reston (CDC, 2000).

1976 284 1976 %53 250 55 %88 318 1.000 10 %56 10 (Johnson, 1982).

1977 33 22 1979

1976 850

[illegible] 325 [illegible] 1977 [illegible] 1976 [illegible] 1980 [illegible] .(Heymann *et al.*, 1980) [illegible] enzootic [illegible]

[illegible] 315 [illegible] 1994 [illegible] 49 [illegible] 1979 [illegible] 34 [illegible] 425 [illegible] 1996 [illegible] 60 [illegible] 31 [illegible] 1995 [illegible] .2001 – 2000 [illegible] (%81) [illegible] 1995 [illegible] (%53) [illegible] 2002 – 2001 [illegible] 1994 [illegible] 1996 [illegible] .(CDC, 2002) [illegible]

[illegible] %19 [illegible] .(WHO, 1978a) [illegible] %1 .(Bouree and Bergmann, 1983) %8 [illegible] reactor [illegible] 64:1 [illegible] 4:1 [illegible] 200 [illegible] 4 [illegible] Ivanoff *et al.*, 1982;) [illegible] (1.024:1 [illegible] 512:1 [illegible]) [illegible] .(Knobloch *et al.*, 1982

[illegible] 4265 [illegible] %3.2 [illegible] %21.3) [illegible] %24.4 [illegible] Johnson *et* [illegible] *al.*,) (1993a [illegible] (%37.5) Aka [illegible] (Johnson *et al.*, [illegible] (%13.2) [illegible] .1993b) (Bertherat *et al.*, [illegible] %10.2 [illegible] .1999)

[illegible] .(WHO, 2002; Leroy *et al.*, 2000b) [illegible] .(WHO, 1985) [illegible] 4 – 3 [illegible] %48 [illegible] %90 [illegible] melena [illegible]

[illegible] 5 – 4 [illegible] .(WHO, 1978b) [illegible] .(WHO, 1985) [illegible] .(Sureau, 1989) [illegible]

[illegible] .(Fenner *et al.*, 1993) [illegible] Langour [illegible] .(Peters *et al.*, 1992) [illegible]

[illegible] 1.000 [illegible] 1980 [illegible] Johnaon *et*) [illegible] 1977 [illegible] 184 [illegible] 3 [illegible] .(*al.*, 1981 [illegible] 128:1 [illegible] 64:1 [illegible] .(Johnson B.k. *et al.*, 1982) [illegible]

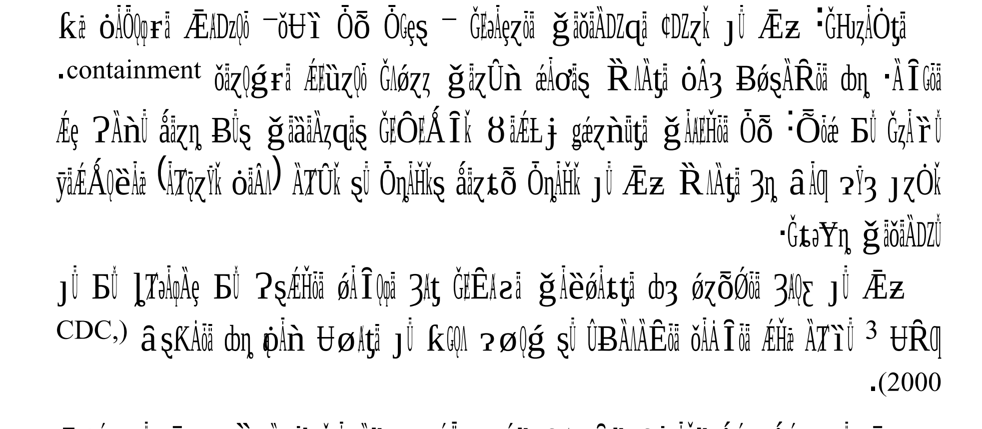
[illegible] 67 [illegible] 14 [illegible] 1976 [illegible] 9 [illegible] 14 [illegible] (WHO, 1978b) [illegible]

[illegible] 7 [illegible] 8 [illegible] (WHO, 2000) [illegible] (CDC, 2000).

[illegible] (4 [illegible])

[illegible] Homologous [illegible] (Geisbert *et al.*, 1991) [illegible] G [illegible] (Saijo *et al.*, 2001a; Ksiazek *et al.*, 1999; Saijo *et al.*, 2001b; Ikegami *et al.*, 2002).

reserve-transcription [illegible] Drosten *et al.*, 2002, Leroy *et al.*,) [illegible] (2000a.



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ENCEPHALOMYOCARDITIS

B33.8 ICD-10
ICD-10 B33.8 Other specified viral diseases

SK- MM

.Pcornaviridne *Crdiovirus* capsid 30 – 25 .icosahedrally *Rhinovirus* *Enterovirus* *Hepatovirus* *Aphthovirus* .(A

1946 – 1945 44 %38.6

[illegible] (Tesh, 1978) [illegible] (Zimmermon *et al.*, 1991) (131/26) %19.8 (947/33) %3.5 [illegible]

[illegible] 1981 – 1975 [illegible] 9 [illegible] (Ramos *et al.*, 1983)

[illegible] 104 [illegible] 2.614 [illegible] %89.4 [illegible] (Zimmerman *et al.*, 1991) [illegible] %8.5 [illegible] %13.8 [illegible] 42 [illegible] 635 [illegible] %6.9 [illegible] (Gualandi *et al.*, 1989)

[illegible]

[illegible] 14 [illegible] pleocytoisis 3 – 2 [illegible] 5 – 4 [illegible]

[illegible] 20 – 3 [illegible]

[illegible] hydropericarditis [illegible]

.(Murnane, 1981) [illegible]

[illegible] 277 [illegible] 22 [illegible] 1970 [illegible]

[illegible] 57 [illegible] 42 [illegible]

(Lavicka *et al*) [illegible] %47.7 [illegible] %6.6 [illegible]

.(Gómez *et al*., 1982) [illegible]

[illegible] mummification [illegible]

[illegible] 135 [illegible] (%17) 23 [illegible]

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[illegible] liveborn [illegible] 23 [illegible]

Links *et al*.,) [illegible] .(1986

[illegible]

.(Dea *et al*., 1991) [illegible] pneumotropic

[illegible]

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.(Hubbard *et al.*, 1992)

(Tesh and) Wallace, 1978

.(Tesh and Wallace, 1978)

8 – 6

(Littlejohns and Acland, 1975)

BHK – 21,)

(Vero, HeLa

pantropic

(Joo, 1992)

Acland, H.M., I.R. Littlejohns. Encephalomyocarditis virus infection of pigs. 1. An outbreak in New South Wales. *Aust Vet J* 51:409–415, 1975.

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EPIDEMIC POLYARTHRITIS

ICD-10 B33.1 Ross River disease ICD-10 B33.1

.exanthema

Alphavirus A

.Togaviridae

.(Woodroofe *et al.*, 1977)

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4.705 2000 – 1991 47049

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[illegible] 1979 [illegible] 630.000 [illegible] 300.000 [illegible] 50.000 [illegible] (Miles and Mataika., 1981) [illegible] (Tesh *et al.*, 1981) [illegible] 31.000 [illegible] 13.500 [illegible] 1992 [illegible] (Rosen *et al.*, 1981) [illegible] 100.000 [illegible] 36.4 [illegible] 5.516 [illegible] 1993 [illegible] 100.000 [illegible] 139.6 [illegible] 100.000 [illegible] 34.1 [illegible] 123 [illegible] 1.602 [illegible] (WHO, 1994) [illegible]

[illegible] 1991 [illegible] 2.873 [illegible] %72 [illegible] %25 [illegible] %8.5 [illegible] 1991 – 1981 [illegible] 1981 [illegible] 39 – 30 [illegible] (Hawkes *et al.*, 1993) [illegible]

[illegible]

[illegible] 21 [illegible] 3 [illegible] 9 [illegible]

°38

Knuckles

%40

Mudge and) 5

6 incapacity .(Aaskov, 1983; Fraser, 1986

1.196

.(Hawkes *et al.*, 1985) 1984 – 1983

O'nyong – Chikungunya Mayaro Barmah

.Sindbis nyong

virologic

.(Gard *et al.*, 1977)

Aedes vigilax

A. polnesiensis

(Vale *et al.*, 1992)

(%1.6)

Norman

(Broom *et al.*, 1989)

(1993)

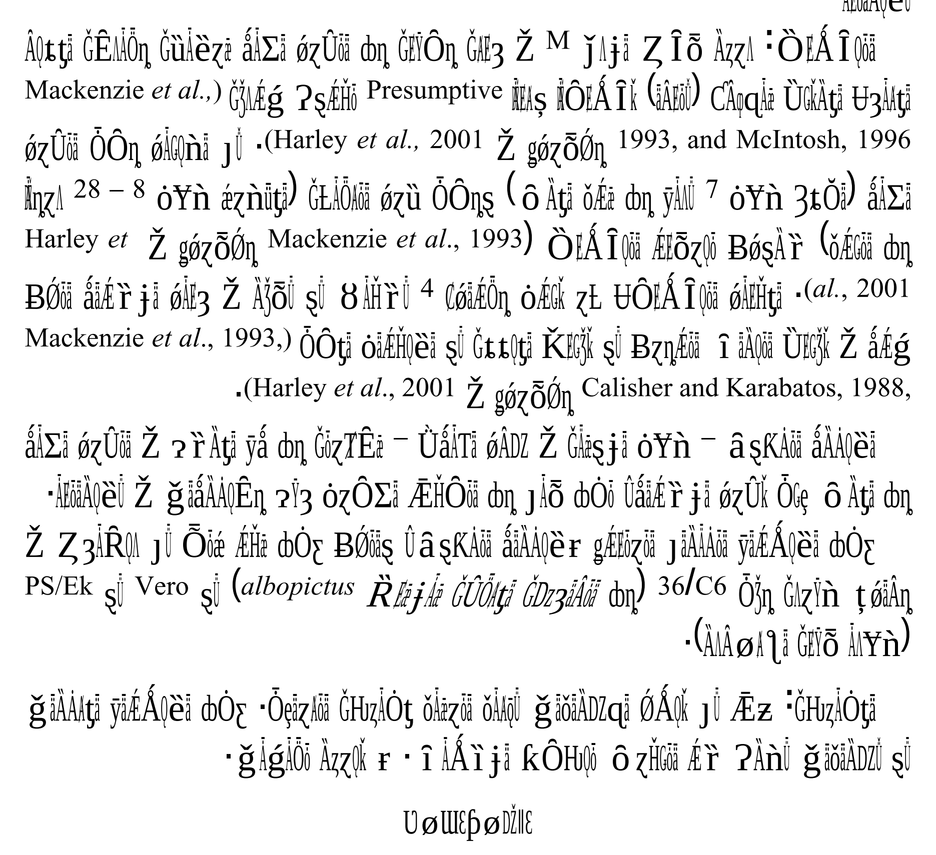
A. tremulus

macropods

[illegible] 100 [illegible] (Rosen *et al.*, 1981) [illegible] (Rosen *et al.*, 1981) [illegible] (Tesh *et al.*, 1981) [illegible] 11.368 [illegible] M [illegible] M [illegible] 1979 Aaskov *et al.*,) [illegible] (1981.

[illegible] (1993) [illegible] (Miles and Mataika, 1981). [illegible]

[illegible]



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[illegible] C [illegible]
FEVER CAUSED BY GROUP C BUNYAVIRUSES

[illegible] ICD-10 A93.8
ICD–10 A93.8 Other specified arthropod – borne fevers

[illegible] serogroup [illegible] 100 – 90 [illegible] *Bunyaviridae* [illegible] B, A [illegible] C [illegible] C [illegible] 4 [illegible] Bruconha [illegible] (*Melanoconion* [illegible]) [illegible] (Calisher *et al*., 1983) *Sacchattae*.

[illegible] C [illegible] native [illegible]

Caraparu [illegible] 50 [illegible] Oriboca [illegible] 534 [illegible] 102 [illegible] 83 [illegible] Murutucu [illegible] 12 [illegible] 9 [illegible]

[illegible] .(Iversson *et al.,* 1987) [illegible]

[illegible]

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	Ossa [illegible]	[illegible]	[illegible]
[illegible]		Apeu [illegible]	Caraparu
[illegible]		[illegible]	
[illegible]	[illegible]	[illegible]	Marituba [illegible]
[illegible]	Restan [illegible]	Nepuyo [illegible]	
[illegible]	Gumbo Limbo [illegible]		
[illegible]			
[illegible]			
[illegible]		[illegible]	Oriboca [illegible]
[illegible]		Itaqui [illegible]	
[illegible]			

Berg, T.O., ed *International Catalogue of Arboviruses Including Certain Other Viruses of Vertebrates,* 2nd ed. Atlanta; Centers for Diseases Control; 1975. (DHEW pub1. CDC 75-8301). Table reproduced in Scherer *et al.,* 1983. [illegible]

[illegible] 6 – 2 [illegible] undifferentiated [illegible]

[illegible] sloth [illegible]

(14):

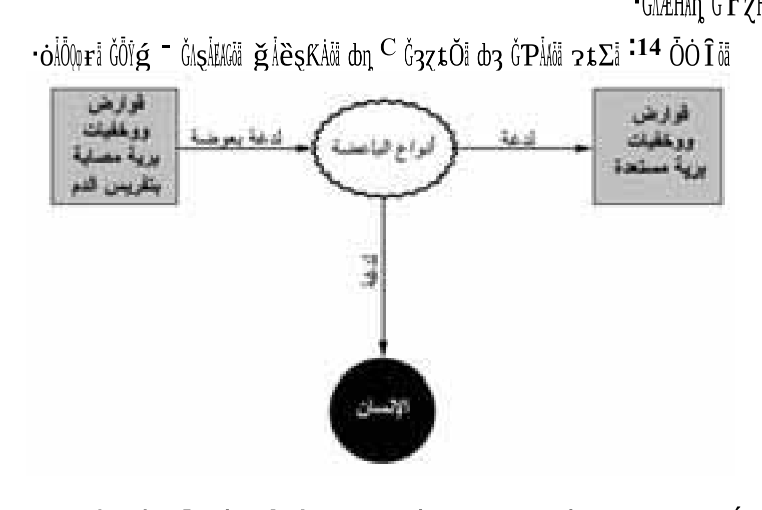
Proechimys guyannensis

.Zygodontomys, oryzomys *Oryzomys capito*

Melanoconion *culex*

portesi *vomerifer*

14: C



VERO

[illegible]

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Iversson, L.B., A.P. Travassos da Rosa, T.L. Coimbra, I.B. Ferreira, E. da S. Nassar. Human disease in Ribeira Valley, Brazil, caused by Caraparu, a group C arbovirus: Report of a case. *Rev Inst Med Trop Sao Paulo* 29:112–117, 1987.

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FOOT-AND-MOUTH DISEASE [illegible]

[illegible] ICD-10 B08.8 [illegible]

ICD-10 B08.8 Other specified viral infections characterized by skin and mucous membrane lesions

[illegible] hoof [illegible] (aftosa, Aphthosis) [illegible] .contagious [illegible] epizootic aphthae [illegible]

[illegible] .Picornaviridae [illegible] *aphtovirus* [illegible] capsid [illegible] 30 – 20 [illegible] .solvents [illegible] detergents [illegible]

VP1, VP2, VP3, [illegible] capsomere [illegible] 60 [illegible] VP4 [illegible] VP4 [illegible] VP1 [illegible] nucleoid

SAT_3, ASIA1 [illegible] C, O, A SAT_1, [illegible] antigenic plasticitity [illegible] SAT_2, [illegible] mutate [illegible]

[illegible] C, O, A [illegible] SAT_1 [illegible] 1962 [illegible] SAT [illegible] 1970 [illegible] 1973 [illegible] ASIA1 [illegible] (Pereira, 1981) [illegible] (FAO, 1985) [illegible] 1984

[illegible] O Pan Asia [illegible] 1990 [illegible] 1998 [illegible] 1996 [illegible] 2000 [illegible] 1908 [illegible] 1934 [illegible]

2001 – 2000 [illegible]

[illegible] 161 [illegible] 766 [illegible] 1990 [illegible] 1999 [illegible] (PAHO, PANAFTOSA, 2000) 1994 [illegible]

[illegible] 2001 [illegible] 2000 [illegible] 2.126 [illegible] 2001 [illegible] A [illegible] 81 [illegible] O [illegible] 7 [illegible] A [illegible] O [illegible] 5 [illegible] A [illegible] 15 [illegible] 4 [illegible] O [illegible] 15 [illegible] 61 [illegible] .2001 [illegible] .2003 [illegible] 42 [illegible] .(OIE, 2003) [illegible] 2002 [illegible] .(OIE, 2003) [illegible] .2003 (OIE, 2003) [illegible]

[illegible] .(FEDSA, 2001) [illegible]

[illegible] A22 [illegible] O1 [illegible]

[illegible] .2001 [illegible] 2000 [illegible] 1992 – 1991 [illegible] [illegible] O1 [illegible] O [illegible] SAT2, SAT1, A [illegible] .(OIE, 2003) [illegible]

[illegible] :2003 [illegible] ASIA1, C, O, A [illegible] (OIE, 2003) [illegible]

[illegible] 40 [illegible]

[illegible]

[illegible] enzootic [illegible] panzootic[2] [illegible] exotic [illegible] inactive [illegible] (Cases Olascoaga *et al.*, 1982) [illegible] (endenopidemic [illegible]) [illegible]

[illegible] 4 – 2 [illegible] 8 [illegible]

---

2. panzootic [illegible]

(1962)

aphthae

C

$10^{-3.3}$ LD_{50}

$10^{-6.5}$

7 .(Pilz and Garbe, 1965) O

.1965 – 1960

$°38$

C

.(Eisner *et al.*, 1967)

(1967) (1967)

cytopathic

$10^{6.8}$ ID %50 $TCID_{50}$

30

cytopathogenic

36

(Meléndez, 1961)

416.000 TCID

ID 61

21 15 (Wetterlein, 1954) A C 13

cloven-hoofed

[illegible] aphtha [illegible] band [illegible] interdigital [illegible]

[illegible] 4 [illegible] 48 [illegible] 3 – 1 [illegible] 2 – 1 [illegible] %5 [illegible] %4 [illegible] %2 [illegible] %1 [illegible]

snout

22.000 %10 1924

(*Erinaceus europaeus*)

overwinter

.(Hedger, 1981)

(*Syncerus caffer*)

bovid

5 ... 1981)

... prodromal ... 5 – 3 ...

... aphthae ...

... 10 – 8 ... abiate ...

... 4 – 1 ...

... (Brooksby, 1982) ...

(Callis, 1979) ... °85 ... 4 ...

offal

probang (Brooksby, 1982)

(Brooksby, 1982)

(1993)

9

2.5

(Anderson *et al.*, 1974) %3.34 %0.49

%42

%32 VIA[3]

(Mathias *et al.*, 1981)

7

tangentially

(*Saiga tatarica*)

1967

(*Syncerus caffer*)

(Hedger, 1981)

---

[3] virus-infection -associated ... VIA ... 6

[illegible] 48 [illegible] 14 [illegible] (Hyslop, 1970) [illegible] probang [illegible] 15 [illegible] 48 [illegible] 24 [illegible] transfer [illegible] (Sellers *et al.*, 1971) [illegible] (Sellers *et al.*, 1971) [illegible]

[illegible]

[illegible] inoculation [illegible]

[illegible] Crowther and Abu) [illegible] (Elzein, 1979; Gomes *et al*., 1989 [illegible]

[illegible]

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[4] [illegible] *calicivirus* [illegible] 1956 [illegible] (Oden hal, 1983) [illegible] (Karstad, 1981) [illegible]

livestock

1992

%100

6

(Bahnemann and Mesquita, 1987)

90 30

21

30

30 3

[illegible] *et al.*, 1988) [illegible]

[illegible] subunits [illegible] VP3 [illegible] 20 [illegible] Bittle *et al.*,) [illegible] .(1982

[illegible]

[illegible]

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HERPES SIMPLEX (TYPE 1) (1 [illegible]) [illegible]

[illegible] ICD-10 B00.1
ICD-10 B00.1 Herpesviral vesicular dermatitis

human herpesvirus, *human Herpesvirus* [illegible] (2 [illegible] 1 [illegible])

[illegible] subfamily [illegible] Herpesviridae [illegible] Alphaherpesvirinae [illegible] nucleocapsid [illegible] 200 [illegible] 180 [illegible] 2 [illegible] 1 [illegible] 1 [illegible] 2 [illegible] *herpesvirus simie* [illegible] Hilliard *et al*.,) 1 [illegible] 2 [illegible] 1 [illegible] (1989

[illegible] 2 [illegible] 1 [illegible] chorioallantoic [illegible] 1 [illegible] °40 [illegible] °40 [illegible]

.latency

%90 %70

owl 1

(*Aotus trivirgatus*)

Hylobates) 84

6 .(*lar*

(Smith *et al.*, 1969) 84 16

(Emmons, 1983)

.(McClure *et al.*, 1972) (*Tupaia glis*)

Pan) 6

(*Pan paniscus*) (*trolodytes*

6

(McClure *et al.*, 1980)

.2

12 – 2

%10

(Benenson, 1990)

latency

(sensitive

(Hirsch, 1991)

(blister

vidarabine

7 – 4

speckled

cytopathic

(Berría, 1991)

ՄøШƐþøDŽǁƐ

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HERPESVIRUS SIMIAE *ƕȋƨƑǖƨǆǁƐ ƕȋƨǴþNJǁƐ ƕƨNjþȋƺǁƐ*

ICD-10 B00.4 Herpetic encephalitis Ȉ ƨǴþNJǁƐ ƵƑDžǭǁƐ ƒƑNJǂǁƐ **ICD-10 B00.4**

.B ǦǈèȦȦÊȦöä ǦǈÊǟȀTä ǦèşKȦöȦǟ ȜşǼȞöä ȖB âşKȦöȦǟ ȜşǼȞöä :ğȦȥắäȀţä

ȂȒȦÜ ȣȀȞǨ ɄøǪöäş Ȗ*Herpesvirus Simiae ǦǈèȦȦÊȦöä ǦǈÊǟȀTä* ǦèşKȦöä :ğȦǼǦǦÊöä ğȦèşKȦöä ǦŸǈÔȥ ÒǝȦÔǹ ȯȥǵ ŌǈòȦȦǪöä ȸŋ ǼȦÂţ .*Herpesvirus* B *ǦǈÊǟȀTä* ǦèşKȦöȦǟ .Herpes Simplex ÙǈÊǦöä ÈǟȀTä :ŌÔȥ ȀȚǭä :ǦǈÊǟȀTä ǦȦşȦȦöǰä

ōȦÓţä ÈȦDZ ȸŋ ğȦŋǼŌţä ƙǟ ɄǨǼǦù ŌÒÎǟ ȜşǼȞöä ǫǼƠ :ŽäȀȣƨä ţäȥǪöä ǦǈƧȥţä ǳȦȦȀöä ŌÔȥ ȯŸǹ ắäǺȦ ôȀţä ţȥęş ȷÜ ǼȽȥì :ǼȦTä Ž ·ȦǼèÜ Ž *Macacca* *ǦǈÊǟȀTä ǦèşKȦöä* ȝŋ ǦǑǈǭş ǦȦǼȒǪÊŋ ǦęŸȞǟ ŌÔǪȦ ɃǾöäş ÜSA-8 âşKȦöä ắȀȦǪèä ·ȻǼȞǟş (*Cercopithecus aethiops ɄøǟȥǈǭǰȲ dzşắȀŌöä*) ǦǈŌȦȀȥÜ öäȀȒǹ ÈǈǪȦÊǪ ȸŋ Ü*ǦǈèȦȦÊȦöä*

[illegible] (papio [illegible]) [illegible]

[illegible] 25 [illegible] 1934 [illegible] 1957 [illegible] 1987 [illegible] 1973 [illegible] 1989 [illegible] (Holmes *et al.*, 1990) [illegible] (CDC, 1989) [illegible] 1991 [illegible] (Weigler, 1992) [illegible]

[illegible] %20 [illegible] %10 [illegible] (*mulatta* [illegible]) [illegible] %100 [illegible] %90 [illegible] (*M. cyclopis* [illegible]) (*M. arctoides* [illegible]) [illegible] (*M. radiata* [illegible]) (*M. fuscata* [illegible]) [illegible]

[illegible] %11.2 [illegible]

[illegible] 3 [illegible] %16.6 [illegible] %4.2 [illegible] (Rawls, 1979) [illegible] irus [illegible] %35 [illegible] Hutt *et al*.,) [illegible] (1981 [illegible] (*Papio* [illegible]) [illegible] SA-8 [illegible]

– [illegible] – [illegible] %15 [illegible] (Rawls, 1979) [illegible]

5 [illegible] 5 [illegible] (1990) [illegible] (Rawls, 1979) [illegible] 21 – 3 [illegible]

Acyclovir

.(Weigler, 1992) ganciclovir

332 ... 14.400

.(Keeble, 1960)

14 – 7

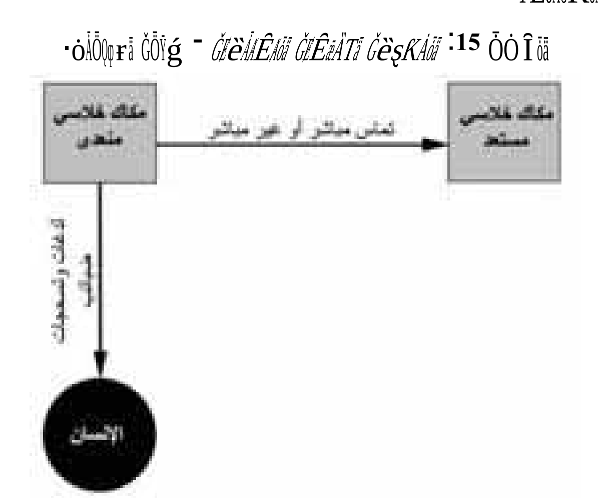
(*M. fasciciluris*)

capuchin

marmoset (*Cebus*)

gliosis

15



flask (Weigler, 1992)

(CDC, 1987; Holmes *et al.*, 1990)

3 … 138 … 21 … 159

(Holmes *et al.*, 1990)

18

in situ

(Weigler, 1992; Scinicariello *et al.*, 1993)

cytopathic

(4

dot immunobinding

psoralen

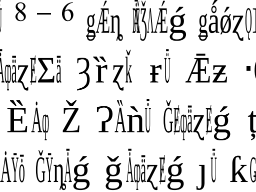
Heberling)

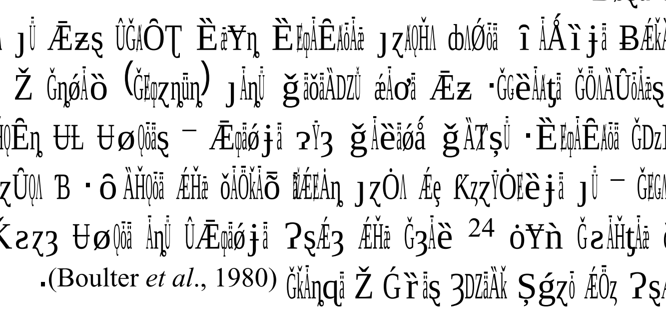
(and Kelter, 1987

SA-8

%50

(Kalter *et al*., 1978; Hutt *et al*., 1981)





(Boulter *et al.*, 1980).

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ILHEUS FEVER [illegible]

[illegible] ICD-10 A93.8
ICD-10 A93.8 Other specified arthropod-borne viral fevers

B [illegible] *Flavivirus* [illegible] .Flaviviridae [illegible]

[illegible]

[illegible] 368 [illegible] (%21) 76 [illegible] .(Prías-Landínez *et al.*, 1968) [illegible]

oncolysis

(*Cebus*)

Aedes Psorophora

Ferox *A. serratus*

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INFLUENZA [illegible]

[illegible] **ICD-10 J10.1**

[illegible]

ICD-10 J10.1 Influenza with other respiratory manifestations, influenza virus identified

[illegible] Grippe [illegible]

Orthomyxo- [illegible] A [illegible] B [illegible] C [illegible] viridae [illegible] (N) neuraminidase [illegible] (H) hemgglutinin [illegible] (WHO, 1980) (N9 [illegible] N1) [illegible] 9 [illegible] (H14 [illegible] H1) [illegible] 14 [illegible] A [illegible] (2) [illegible] (C [illegible] B [illegible] A [illegible]) (1) [illegible] (3) [illegible] A [illegible] (6) [illegible] (5) [illegible] (4) [illegible] 1963 [illegible] duck [illegible] A [illegible] A/duck/Ukraine/1/63 (H3N8) [illegible]

100 [illegible]

(M1 M2) (M)

(NP) nucleoprotein

M1 helicoidal

A B

Fenner *et al*.,)

(1993

H N

H N 100

(Shortridge, 1982) A

A

Phylogenetic

(Webster *et al*., 1992)

(N9 H14)

B C

B

C 15 1981

(Gno *et al*., 1983)

(Kawano *et al*., 1978; Mannguerra *et al*., 1992)

1989 – 1988 134

%32 C

Vibrio ... *cholerae*

A ... C/Ann Arbor/1/50

(Homma, 1986) ... 10

B

1.030 (%0.1) 1 ... B ... 504 (%3.2) 16

(Kawano *et al*., 1978)

A

A ... (Kaplan, 1982) ... H ... N

(Laver *et al*., 1984)

A ... B ... C

(1968، 1957، 1918)

A ... A ... B

[illegible] 1986 – 1985 [illegible] B [illegible]

[illegible] 1969 – 1968 [illegible] B [illegible]

[illegible] B [illegible] (H3N2) A [illegible]

.(WHO, 1987) [illegible]

[illegible] C [illegible]

[illegible] 1919 – 1918 [illegible] H1N1 [illegible] 21 [illegible] H3N2 [illegible] 1889 [illegible] .interim [illegible]

[illegible] %40 [illegible] %15 [illegible] (Flu [illegible]) H2N2 [illegible] 1958 – 1957 [illegible] 70 [illegible] 5 [illegible] %30 [illegible]

[illegible] %70 [illegible] 62.000 [illegible] .1958 – 1957 [illegible]

[illegible]) H3N2 [illegible] 1969 – 1968 [illegible] (A/Hong kong/68 (H3N2) [illegible] 1977 [illegible] 27.900

H1N1 H3N2 H3N2 39 9 H1N1 (Knez, 1991) 6 – 5 (Betts and Douglas, 1990) 9 5 4 12 1994 – 1993 Flu 3.963 B A (%99.9) 3.959 B (H3N2) A (H1N1) A 1994 – 1993 CDC,) (H3N2) A (1994 1994 – 1993 A/Beijing/32/92 A/shangdong/9/93 A

(H1N1) H1N1 H3N2 A

H1N1

Dea *et al*.,) (Webster *et al*., 1992)

1918 (1992

1919 – 1918

(H1N1

(Kaplan, 1982)

1919 – 1918

1919 – 1918

H1N1

1968 1979 1976

(Fenner *et al*., 1993)

%33 %25

7 – 6

(Easterday and Hinshaw, 1992) %45

(Schild, 1981) 1977 1930

139 H3N2 1969 – 1968

276 11 1969/12

1970/1

A/Hong Kong/68 (H3N2)

H3N2

1976

H3N2

Shortridge *et*)

H3N2 (*al*., 1977

– (Pérez Breňa, 1980) (Wallace, 1979a) –

H3N2

A/Hong Kong/68

H3N2

A/swine/Hong Kong/3/76 oligonucleotide map

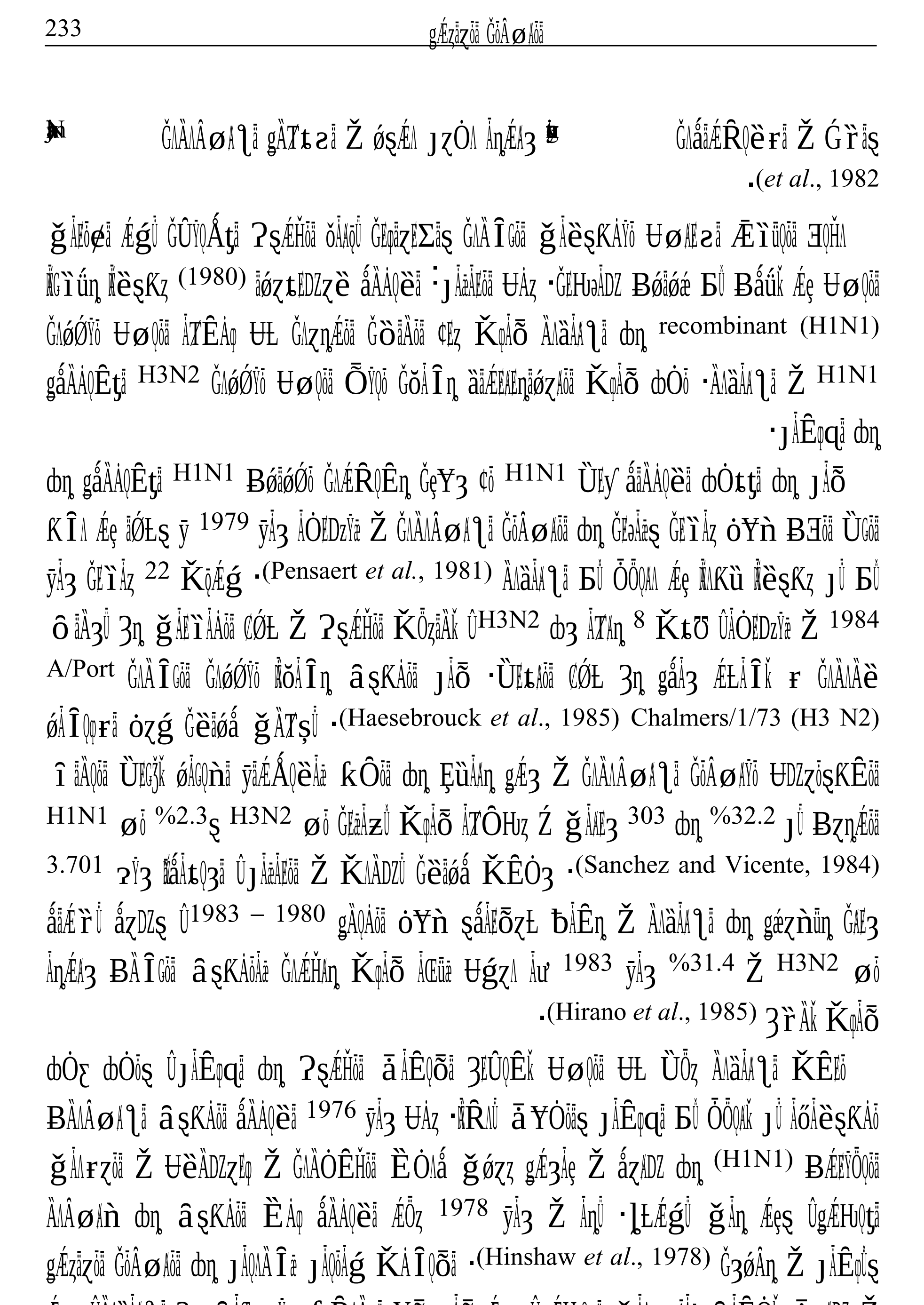
A/Hong Kong/68

1976 H3N2

(A/swine/Hong Kong/4/76)

A/swine/Hong Kong/3/76

1968



.(et al., 1982

(1980) recombinant (H1N1) H3N2 H1N1

H1N1 H1N1 1979 22 .(Pensaert et al., 1981) H3N2 8 1984 A/Port .(Haesebrouck et al., 1985) Chalmers/1/73 (H3 N2) H1N1 %2.3 H3N2 303 %32.2 3.701 .(Sanchez and Vicente, 1984) 1980 – 1983 1983 %31.4 H3N2 .(Hirano et al., 1985)

1976 (H1N1) 1978 .(Hinshaw et al., 1978)

[illegible] .(Dasco *et al.*, 1984) [illegible] H1N1 [illegible] 32 [illegible] 4 [illegible] 8 [illegible] (%76) 19 [illegible] 25 [illegible] .A/Wisconsin/3523/88(H1N1) .(Wells *et al.*, 1991) [illegible] H1N1 [illegible] %20 [illegible] H1N1 [illegible] .(Webster *et al.*, 1992) [illegible] 11 [illegible] 7 [illegible] H1N1 [illegible] 11 [illegible] Wright) (dot – Blot [illegible] 10 [illegible] .(*et al.*, 1992

[illegible] 3 [illegible] (H1N1) [illegible]

[illegible] 1956 [illegible] .A [illegible] A/equine/Prague/1/56 (H7N7)

[illegible] H [illegible]
[illegible] (H7N7) [illegible]
[illegible] A/equine/Miami/1/63 (H3N8) [illegible]
[illegible] C [illegible]
[illegible]
[illegible]

[illegible]
[illegible]
[illegible]
[illegible] 90 [illegible] %60 [illegible]
[illegible]
[illegible] 1963 [illegible] C [illegible]
[illegible]
van) 1979 – 1978 [illegible] A/equine/Miami/63
.(Oirschot *et al*., 1981

[illegible]
[illegible] A/equi 2 (H3N8)
[illegible]
[illegible]
.(Webster *et al*., 1992) [illegible] switch [illegible]
[illegible] H7N7 [illegible]
[illegible] H3N8 [illegible]
[illegible] (Webster *et al*., 1992) [illegible]
[illegible]
[illegible] A/equi 2 [illegible]

[illegible] A/Hong Kong/1/68(H3N2) [illegible] 1895 [illegible] 1889 [illegible] A/equine/Miami/1/63 [illegible] 15 [illegible] 5 [illegible] 10 [illegible] (Beveridge, 1977) [illegible]

[illegible] N9 [illegible] N1 [illegible] H14 [illegible] H1 [illegible] A [illegible] (Webster *et al.*, 1978) [illegible] (Webster *et al.*, 1992) [illegible] Tern [illegible] (*Sterna hirundo* [illegible]) [illegible] (*Puffinus pacificus*) shearwater [illegible] (H7N7 [illegible]) A [illegible] 1984 – 1983 [illegible] 11 [illegible] 10 [illegible] 125.593 [illegible]

1929 ... 3 ... (OIE, 1983) H5N2 ... (1984) ...

... (Schild, 1981; WHO, 1981) ...

... 1975 ... 1929 ...

... A/FPV/Dutch/27 (H7N7) ... A/chicken/Pennsylvania/1370/83 (H5N2) ... 138 ... 1994 ... 11 ... rhea ... 41 ... crane ... cassowary ... (1994/4/20 ... H7N7 ... H7N1 H5N1 ... H5N3 ... H5 ... H7 ... avirulent ... Easterday and Hinshaw,) ... (1991

...

[illegible] cloaca [illegible] C [illegible] 4 [illegible] 46 [illegible] (43) [illegible] H-N [illegible] Shortridge,) [illegible] .(1982

[illegible] (H1N1) [illegible] (Ottis and Bachman, 1980) [illegible] .(Mohan *et al.*, 1981) [illegible] A [illegible] (*Balaenoptera acutorostrata*)

HN (*Phoca vitulina*) (*Callorhinus ursinus*) 1980 – 1979 %20 (H7N7) 1983 %4 H4N5 Ferrets (Lang *et al*., 1981; WHO 1981) Webster) 33 (*et al*., 1981 3.000 %100 H10 H10N4 N (KLingeborn *et al*., 1985)

A/Hong Kong/68 (H3N2) H3N2 H1N1 (Buonavoglia and Sala, 1983)

3 – 1

(Betts and Douglas, 1990) ... Amantadine ...

... rimantadine ...

.(Betts and Douglas, 1990)

H1N1 H2N2 H3N2

Gnotobiotic

(Dea *et al.*, 1992)

3 – 2

3 – 1

10 – 2

C

(H3N8) C

(H7N7) 1

%20

1984 – 1983

H5N2

(H7N7)

Murphy (1991)

[illegible] H3N8 [illegible]

[illegible] 1961 [illegible] (*Sterna hirudo*) (terns [illegible]) [illegible]

[illegible] Flügge [illegible]

[illegible] 4 – 3 [illegible] *drift* [illegible] *shift* [illegible] (H, N) [illegible] 1956 [illegible] 1933 [illegible] H1N1 [illegible] (H2N2) [illegible] 1957 [illegible] 1967 [illegible] H1N1 [illegible] A/Hong Kong/68 (H3N2) [illegible] 20 [illegible] 1977 [illegible]

[illegible] H1N1 [illegible] 1977 [illegible] 1981 [illegible] (H3N2) [illegible] (A/Brazil/78) H1N1 [illegible] (A/Bangkok/79) H3N2 [illegible] (Stuart-Harris, 1981) [illegible] drifts [illegible] shifts [illegible] A [illegible] A/Hong Kong/68 (H3N2) [illegible] (H) [illegible] 1968 [illegible] (H) [illegible] (N) [illegible]

9 ... 14 ...

Stuart-Harris,) ... (1981

(Kilbourne, 1978) ... (H3N2) ... 1968 ...

... 1974 ... (H1N1) ... (Easterday, 1978) ... 1982 ... A/New Jersey/8/76(H1N1)

[illegible] 47 [illegible] 5 [illegible] H1N1 [illegible] anamnestic [illegible] heterotypical [illegible] .(Patriaca *et al*., 1984) [illegible] A/New Jersey/8/76 (H1N1) [illegible] 1918 [illegible] 12.000 [illegible] 500 [illegible] 5 [illegible] H1N1 [illegible] A/Victoria/3/75 (H3N2) [illegible] %10 [illegible] 50 [illegible] .1930 [illegible] %76 [illegible] H1N1

(1992)

(H)

(H7N7)

1981 (H1N1) A

.(Aymard *et al.*, 1985) 1983 – 1982

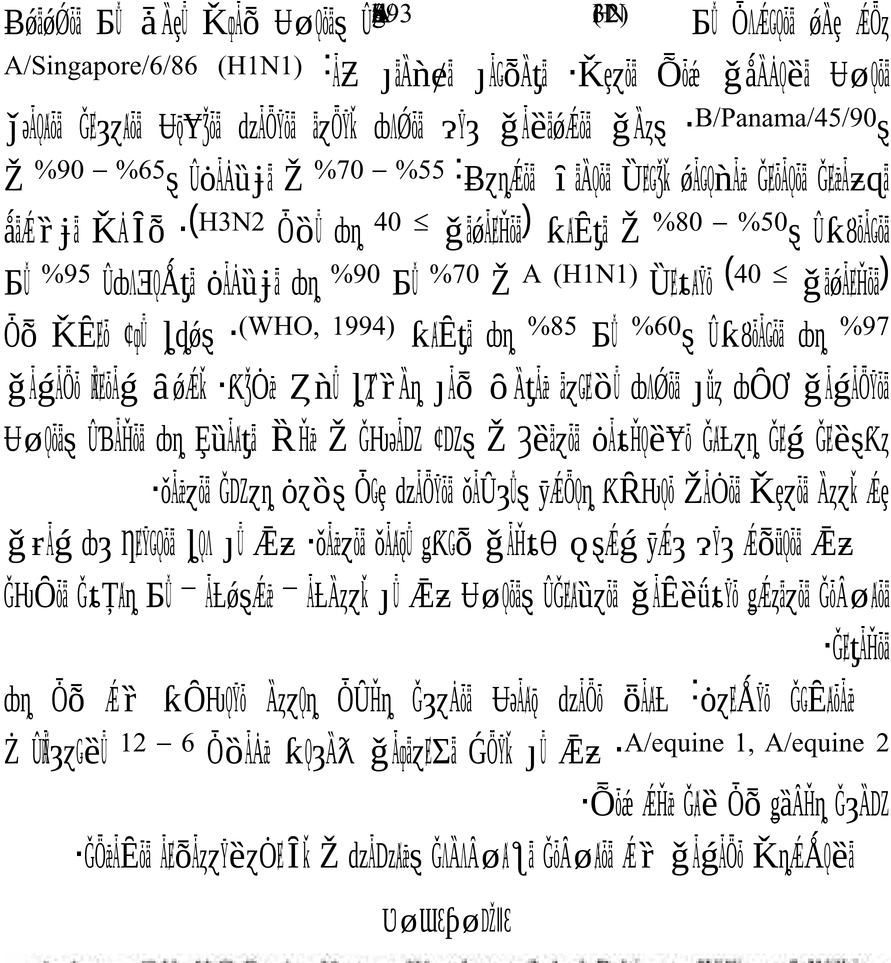
(*A. platyrhncos*) (mallard)

.(Webster *et al.*, 1992)

[illegible]

[illegible]

[illegible] potency [illegible] shift [illegible] (H1N1) [illegible] (H3N2) [illegible]
1994 – 1993 [illegible] A/Beijine/32/92 (H3N2) [illegible] 1993 – 1992



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JAPANESE ENCEPHALITIS [illegible]

ICD-10 A 83.0

[illegible]

[illegible] *Flavivirus* [illegible] Togaviridae [illegible] 400 [illegible]

[illegible] (Hanna *et al*., 1996; Van Den Hurk *et al*., 2001) [illegible]

[illegible]

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[1] [illegible]

[illegible] 5.700 [illegible] 1958 [illegible] 8000 [illegible] 1.800 [illegible] 1.322 [illegible] 50 [illegible] 142 [illegible] 519 [illegible] 100 [illegible] 1982 [illegible] %80 [illegible] 1.179 [illegible] 70 [illegible] %10 [illegible] 10.000 [illegible] 2.143 [illegible] 4.000 – 3.000 [illegible] 100 [illegible] 1982 [illegible] 843 [illegible] 1980 [illegible] (WHO, 1984) [illegible] 396) [illegible] 1148 [illegible] (WHO, 1986) 1985 [illegible] 1982 [illegible] 1988 [illegible] 1982 [illegible] 772 [illegible] %23.7 [illegible] 118 [illegible] (Kar *et al*., 1992) [illegible] %32.2 [illegible]

[illegible] 6 – 3 [illegible] (Huang, 1982) [illegible] 1.000 [illegible] 500 [illegible] 25:1

[illegible]

(Burke *et al.*, 1985) %70

%20

1.339

%56.8 %59.7

(Sakai *et al.*, 1982) %2.1

%50 %20

14 – 4

paresis

(Huang, 1982)

A

(Chu and Joo, 1992)

%70 %50

mummified 1949 – 1947

venereally (Chu and Joo, 1992)

(Habu, 1991)

3

44.8 1967 1948 1948 1948 100.000

100.000 337.1

%25

(Sakai *et al.*, 1985)

Culex (16

triaeniorhynchus

3 [illegible] (Huang, 1982) [illegible] culicine [illegible] *Vishnui* [illegible] *fuscocephala* [illegible] *gelidus* [illegible] 5 [illegible] (Rosen, 1986) [illegible]

[illegible] (Fauna [illegible]) [illegible] ardeid [illegible] *Egretta* [illegible] (*Nycticorax nycticorax*)

[illegible] 4 – 2 [illegible]

[illegible]

[illegible] %5 [illegible] 1963 [illegible] (1964) [illegible] 1.8 [illegible] 3 [illegible]

.(Maeda *et al.*, 1981)

16:

18 ... 4 ... 14

1965 – 1963

Culex pipiens pallens

(*Eumeces latiscutatus*)

%14.3

.(Doi *et al.*, 1983)

.(Monath and Trent, 1981)

.(Rosen *et al.*, 1986)

Ardeid

5 – 1

C6/36 clone .cytopathic

.(Chu and Joo, 1992) *A. allapictus*

M

.(Gatus and Rose, 1983)

.(Yamamoto *et al.*, 2002) M

.(Xinglin et al., 2002)

.(Burke and Nisalak, 1982)

BHK

12 %77 8 ≤

(Poland *et al.*, 1990) 16 ≤

.(Sugawara *et al.*, 2002; Monath, 2002) Vero

11

°37 – 36 100

6 – 5 ... 47 ... °37.4 ... (12 = ...) %100 ...

Xing *et*) ... immunogenic ...

.(Monath, 2002) ... .(*al*., 1988

.(Umenai *et al*., 1985) ...

.(Chu and Joo, 1992) ...

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KYASANUR FOSEST DISEARE

ICD-10 A98.2

ǦŸÔɀ Û*Flavivirus* *ǥÄÁÔʧ ǦèşƘÀöä* ȄÀDZ ȸŋ ƘǤǂä ɃşÀøø âşƘɀ ˙ğÀŒǤȄöä ğÀèşƘÀöä ǦŸÔɀ Ûğ ÀŸÔÀʧÀæ ǦöɀÕÀʧä ǦèşƘÀöä ȸŋ ᴮ Ǥʒɀ ʈ Ŏä ˙ÕäÀè) ǥÄÁÔʧä ğÀèşƘÀöä Ōŋäɀʒ ȸʈȒ ɃǾöä åäÄÕöÀæ ǦöɀÕÀʧä ğÀèşƘÀöä ÆÕĦŋ ƂǗ Ʉʈ ÀÀş Û(Togaviridae ǦŀäÁÅÛöä ȟÀŋÆöäş ţÀÅÀöä āÀƵöäş ɄÀÀÄʅä – ɄĦŀÄöä ɄÛèɀöä Ʉøæşøşɉäş ɄèşÄöä ȟÀŋÆöä āÀƵöä ·Ƃşɉä ǦöÀΣä ǨÔÁì ǬŀǵÆÀTä Ž øɀÀèÀŀõ ǦæÀɖ ɭèä ʔŸʒ ɄƧ ·ɄʈÀ8öä

[illegible] .(Bhat, 1983) [illegible] 1970

[illegible] 1957 [illegible] langur [illegible] bonnet [illegible] (*Presbytis entellus*) [illegible] 181 [illegible] 466 [illegible] 1959 [illegible] 28 [illegible] 13 [illegible]

[illegible] 1983 [illegible] 150 [illegible] 1.155 [illegible] 1961 [illegible] 5 [illegible] .(Chin, 2000) [illegible] *Haemaphysalis spinigera* [illegible] .(Baneryee and Bhat, 1977) [illegible]

[illegible] (Pavri, 1989) [illegible] 87 [illegible] 186 [illegible] .*P. entellus* [illegible] 86 [illegible] 1.046 [illegible] 1957 [illegible] 1973 – 1962 [illegible] .(Sreenivasan *et al.*, 1986) [illegible] 13 [illegible] P entellus 118

8 3 Pavri,) (1989 11 – 6 21 – 9 12 – 2 %10 %5

Webb and) (Burston, 1966

1957 (Iyer *et al.*, 1960) 22 14

ecosystem

(Varma, 1989)

turturis

Argasidae *Ornithoros chiropterphila*

.(Harwood and James, 1979)

493 1,260 .(Harwood and James, 1979)

%85 4.668

biota

.(Banerjee and Bhat, 1977)

Presbytis

Suncus murinus (shrew

porcupine

Rattus blanfordi

(WHO, 1985)

P. entellus

10

%72.5

%59

%1.8

Dandawate)

.(*et al.*, 1980

%100 %70 langat[1] 18

.(Thind, 1981)

.(Chin, 2000)

Banerjee, K., H.R. Bhat. Correlation between the number of persons suffering from Kyasanur Forest disease and the intensity of infection in the tick population. *Indian J Med Res* 66:175–179, 1977.

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Karabatsos, N., ed. *International Catalogue of Arboviruses Including Certain Other Viruses of Vertebrates*, 3rd ed. San Antonio: American Society for Tropical Medicine and Hygiene; 1985.

[1] langat — *Haemafhysalis papuana*

Pavri, K. Clinical, clinicopathologic, and hematologic features of Kyasanur Forest disease. *Rev Infect Dis* 11(Suppl 4):S854–S859, 1989.

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LASSA FEVER ƑƨǗ ĂDŽϴ

ICD-10 A96.2

Ǵèşƙǻä ÈÀDZ БǗ ɄȶǬÀ ȣÆÎöä ʓşåÂŋ ȧÀÛöä åÀÀŋ ƙǴɫä ɃşÀǿ âşƘ ˸ğÀǴǴÊöä 150 – 80 ÈĔÕÀ ÛȯÀÒìɟä åÆǑŋ ȷζƘÀöä ·ǴŸŋÀöä ğÀèşƘÀöä ǴŸÔζ Û*Arenavirus ǴŸŋÀöä* ʔȶΣä ÀŢǭä) ǴȶǶÎöä ğÀÀŢȶşs ğÀǴÀǾȶŸö âÀÊǵ ζƮζ ÕöǾös ÛɄȶǶì ȣŸɖ ȼös ÛÀÛę ÙǴƘÀ ·(ǴŸŋÀöä ğÀèşƘÀöä ǴŸÔζ ğäÀƐư ȯζǵ ŌĔòÀǬöä ȸŋ ÆÀÂţ ǴƐζÂøÀöä ǴÆǬADZøɟä ·ɃşÀȶŸöä ğÀȶĔÎţş ÀǶÊöä āÀƮǬöä ÆǴÊÀ ɃǾöä ŌŋÀǨöÀ ǴÀÆȒǬÊţä ǴƐǵÀöä ȸŋ âşƘÀöä *ƒζǬÊţ)* öäÆǭɟä åÆǨǬţä æÀƨä ȸŋ ţζǭ şǗ āÀȓ ȸŋ ĘǴŋäζŋ Ž ÆDZ ȼæÀÎŋ âşƘζ åÀÀǬèä äǾT åäÆȓǗ ğÆDZş Æęş ÛĘǴŋäζŋ âşƘζ ɄƧ Æęş Û(*Mastomys natalensis ŌǭɟǠ* ÀǹǗ âşƘζ åÀÀǬèä ÀȶÕ ·ÀȓÀư ȷÀÕ ȷǗ ȣÀǨÀ ɍ ȼÀÒös ÛɃζÀǴɛä ȸŋ ȷÀÊǭǗ Ž âşƘÀöä ÀĔÕÀÀζǗ ǴÀøζƮP Ž *Praomys* ôøÀÕöä ȸŋ Àèɍ âşƘÀæ ǴÀÆȒǬÊţä ǴƐǵÀöä ȸŋ ÙǴƘÀ .(Odend'hal, 1983) ʔÛèζöä

(Chin, 2000)

(WHO, 1985)

1969

index patient

1975 1969

1972 – 1970) (1975) (1975, 1974, 1970)

(1975 – 1973

(Saluzzo *et al.,* 1988)

1972 – 1970

%66 %20

(Casals, 1976; Monath, 1975a) %36

%1 %20 %10

(CDC, 2000)

index cases

[illegible] 63 [illegible] .(Fraser *et al.,* 1974) %5 [illegible] 100.000 [illegible] .(Monath, 1987) [illegible] .(CDC, 2002) [illegible] 5.000 [illegible] 300.000 [illegible] 458 [illegible] 5 [illegible] 10 [illegible] 281 [illegible] 23 [illegible] .1966 – 1965 [illegible] 48 [illegible] %11 [illegible] 5 [illegible] Monath,) [illegible] %3,5 [illegible] .(1975a

[illegible] %52 [illegible] %8 [illegible] .(McCormick *et al.,* 1987 and 1987a) [illegible] 15 [illegible] (%25 – %55) [illegible] (%7 [illegible] %4) [illegible] %13 – %12 [illegible] .(Lukashevich *et al.,* 1993) [illegible] .(WHO, 1985) [illegible]

[illegible]

.(Keenlyside *et al.*, 1983)

apathetic

[illegible] et al.,) [illegible] .(1982

[illegible] 16 – 10 [illegible] WHO,) [illegible] (Johnson et al., 1982) .(1985

[illegible] %20.4 [illegible] 10 [illegible] 20 [illegible] .(Sharp, 1982) [illegible] 14 – 0 [illegible] 1978 [illegible] 60) [illegible] .(WHO, 1985) [illegible] 30) [illegible] .(Fisher-Hoch et al., 1992)

[illegible] race [illegible] viruria [illegible] *Calomys callosus* [illegible] .(Johnson, 1981) [illegible] %100 [illegible]

[illegible] .(Demartini *et al.,* 1975) [illegible]

[illegible] .(Chin, 2000) [illegible]

[illegible] 14 [illegible] 16 [illegible] 1970 [illegible]

[illegible]

[illegible] 14 [illegible] Vero [illegible] 32 [illegible] seeding [illegible]

[illegible] 10 7 [illegible] M [illegible] G [illegible] (Chin, 2000) [illegible]

[illegible] (Holmes *et al.*, 1990) [illegible] 10 [illegible] 600 [illegible] 4 [illegible] 4 [illegible] 400 [illegible] 9 – 6

et al., 1990)

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LOUPING ILL

ICD-10 A84.8

ICD-10 A84.8 Other tick-borne viral encephalitis

flaviriras

(1993)

%95

%98

37

Smith and Varma, 1981)

11

26

.(Davidson *et al.*, 1991

7

5

134

15

12

7

150

8

.(Davidson *et al.*, 1991)

(*Allces alces*) elk

(*Cervus elaphus*)

shrew (*Apodemus sylvaticus*) *Lagopus lagopus*) grouse (*Sorex araneus*) .(Bannatyne *et al*., 1980) (*scoticus* %5 %4 %1 .(Blood and Radostits, 1989) %60 3

8 – 2 12 – 2 5 Smith) .(and Varma, 1981

18 – 6 apathy hopping prostrate P %50

Ixodes ricinus

Lagopus lagopus)

(*scoticus*

5.5 brood

.(Reid *et al.*, 1978) 0,6

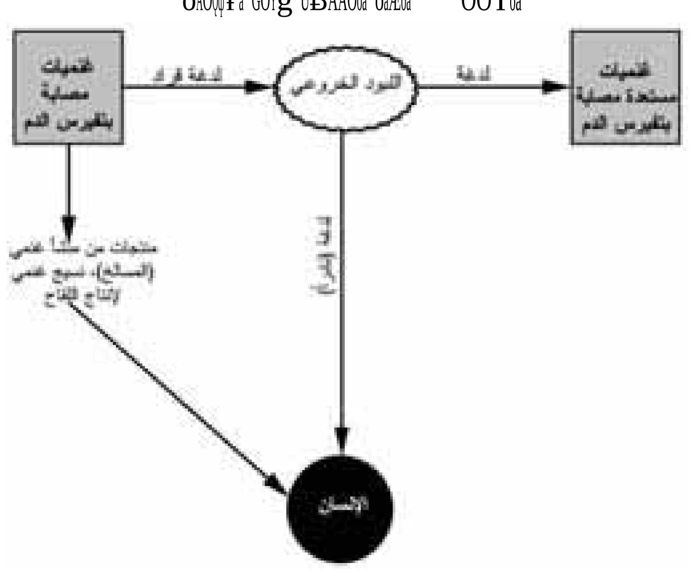
17

concomitant

.(Smith and Varmn, 1981)

Lagopus lagopus) [illegible] (*scoticus* [illegible] .(Reid *et al.*, 1978) [illegible]

[illegible] 17 [illegible]



[illegible] .(Martin, 1981) [illegible] .(Davidson *et al.*, 1991) [illegible]

[illegible] (Bunnatyne, 1980) [illegible] 6 [illegible] 13 [illegible] 5 [illegible]

[illegible] (Davidson *et al.*, 1991) [illegible]

[illegible]

ǓøШɛþøǅǁɛ

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LYMPHOCYTIC ăǋǰƧǅǂǁɛ ƖƑĪǅĭǋǅǁƐǋ ƑĭƑѲƨǁɛ ƒƑǋǂǁɛ CHORIOMENINGITIS

ICD-10 A87.2

.Armstrong ŋφşÀ̏ǪÊŋøǓ őăά ˸8 ǻåÅ̏ţă

Arenavirus 130 – 110

Mus .(*musculus*

.(Morita, 1997)

%10

%0.18

%1.6

1.000

18

(Ackermann, 1982)

[illegible] %8 [illegible] 1.600 [illegible] 7 [illegible] .(Casals, 1982) [illegible]

[illegible] 1971/5 [illegible] 1968/10 [illegible] 47 [illegible] 57) [illegible] 12 [illegible] 181 [illegible] .1974/4 [illegible] 1973/12 [illegible]

[illegible] 41 [illegible] 7.227 [illegible] Ambrosio) [illegible] %6,1 [illegible] %2,4 [illegible] .(*et al.,* 1994

[illegible] 1.149 [illegible] %4.7 [illegible] .(Childs *et al.,* 1991) [illegible]

[illegible] cytopathic [illegible] Transplantable [illegible] 1975 – 1973 [illegible] (Jahrling and Peters, 1992) [illegible] 65 [illegible]

.(Gregg, 1975)

82 %10

.(Dykewicz *et al.*, 1992)

.(Johnson, 1990)

.(*Mus musculus*)

%40 .(*Apodemus sylvaticus*)

%50 (*Mesocricetus auratus*)

.(Lehmann-Grube, 1982)

2 – 1

relapse

[illegible] 21 – 15 [illegible] (3 – 2) [illegible] %95 [illegible] %80 [illegible] 3.000 [illegible] 100 [illegible] myopericarditis [illegible] prenatal [illegible] .(Johnson, 1990) .(Ackermann, 1982) [illegible]

[illegible]

%50 [illegible] %20 [illegible] %50 [illegible] 4 [illegible]

[illegible] 6 – 5 [illegible]

[illegible] .(Thomsen *et al.*, 1982) [illegible] Ahmed *et*) [illegible] .(*al.*, 1987

[illegible] tolerat [illegible]

[illegible] .(Skinner *et al.*, 1976) [illegible]

[illegible] 1990 – 1980 [illegible] 12 [illegible] (tamarin [illegible]) [illegible] (marmoset [illegible]) [illegible]

et al., 1993)

(Callimico goeldii) (Cebuella pygmaea)

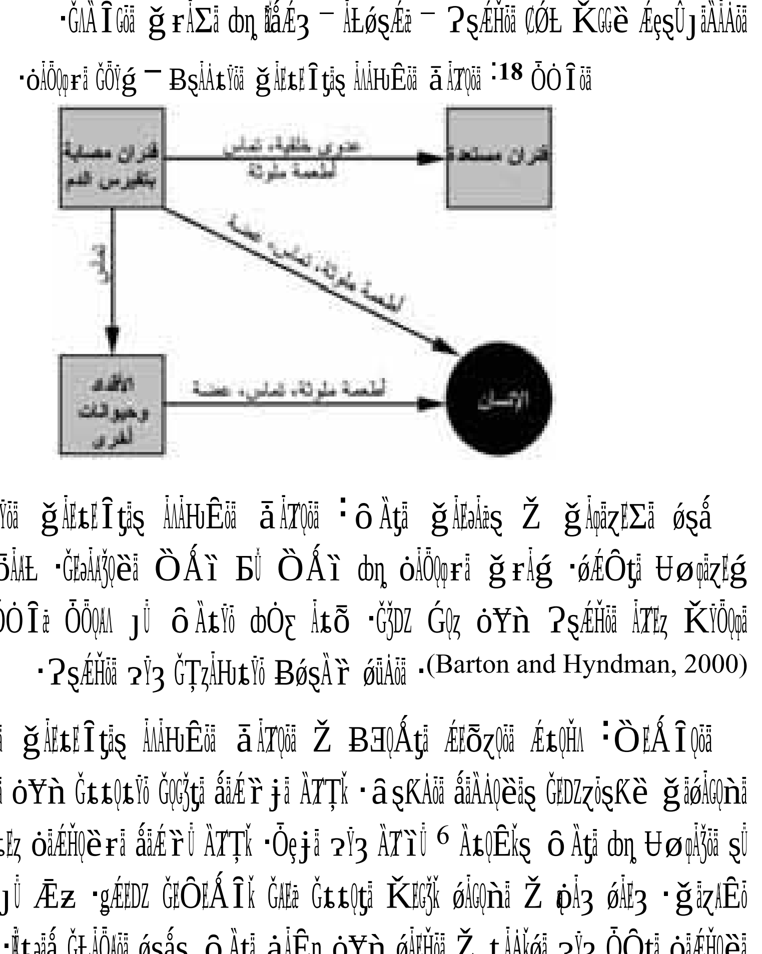
.(Asper et al., 2001)

.(Johnson, 1981)

:(18)

culicoides

aedes



(Barton and Hyndman, 2000)

(Brezin *et al.*, 2000)

(Park *et al.*, 1997)

[illegible] neurotropic [illegible]

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MACHUPO HEMORRHAGIC FEVER ƕŭƺƦǆǁǁƐ ǋǦǊ ƪ ƗǄǮ ǍǄǮƟ

ICD - 10 A96.1

ấƺèɟä âƺÀǼǬöä ȖBolivian hemorrhagic fever ǦǼƺÂøÀöä ǦǼÀǼöƺǦöä ʔȶΣä ˙ğÀƺấäÀţä .Black typhus

ǦèşƘÀöä ÈǄǮ БȖ ɄȶǬÀ ȖƙÀŎä ɃşÀǭø âşƘƺ ȖMachupo ƺäƺ ÎǨÀŋ âşƘƺ ˙ğÀǼǦǦÊöä ǼŐȞŋ ȸŋ ƺȒȝ ƺȽş Ȗarenaviridue ǦǼŸŋÀöä ğÀèşƘÀöä ǦŸǼÔƺ Ȗ*arenavirus* *ǦǼŸŋÀöä* .(ǦǼƺÂøÀöä ǦǼÀǼǬǄǮƺóɟä ʔȶΣä ˙ÀȚǬä) Tacaribe ǼÀóÀõÀǩ

Ž ƺŋƺõÀÀş ÂǼÀǼǬÀǗş ɃóƺŋÀŋ ȴǼöÀęǗ Ž ǦƺşÀȞţä ǦǬƺüƺţä ĘüÀÀţä ȝȓƺǬ ˙ŽäÀȣƨä ţàƺǬöä .ÀǼÀǼöƺǦä ɄøǼä ǦȞüÀŐŋ

ɃøʐɳǞʅ ʅĔŏǞȩǙ Ž ǞǞʐǞè ğǞĔìǞʐ ǨǭǼǵ ·1959 ӯǞʒ ǞǞǞǞè ʔȶΣǟ ğÂĔʅ ˙ϙʂǼΣǟ
Ž ÒǺì 1.100 ôǞʅ ğǟʐǞè 5 ǥǞǪʐ ȯŸǹ ȼǷǙ øǼȩ Ǽȩʂ Û1964 ӯǞʒ ʔøǪǵ ÂĔǞĔǪǞǙʂ
ôǞʈǟ ȷǞõ ·ǞÔǺì (%24) 260 ʅȾǞʅ ğǞɳʂ ÛǦȶÊǷ 5.000 ƂǙ 4.000 øǣ øǼŌǩ ǥǞȾƤ
ǦǞÊǟǟ ÕŸǩ ȯŸǹ ǦĔìǞʐ ǨǭǼǵ ȸÒǐ ÛǦĔǞǞø ĘùǞʅ Ž ǥƘȣò øǘǦǣ 1962 ӯǞʒ ʔøǪǵ ǞǻʂǼȚ
Ǚʐèɉǟ ǒǞǣʐǟ ϙǼǵ ·ǞʒǾǟǞǣ 600 øǟǟ ǞŒǞȮè ƎĔòǙʂ ÛǞǞǞǞǣʂøʂǙ ǥǞǞÂƛ ȷʐǱʐʈǟ ǦǞǞȩ Ž
ÛɃøʐɳǞʅ ʅĔŸȩǙ ǦȶòǞʒ ÛȸǞʐõʐǱ ȷǞè Ž 1964ʂ 1963 ƙǣ (ǥǞʐʂ 122 ʒʅ ǦǟǞǵ 650)
ȷǞÊǷǙ ƂǙ ȷǞÊǷǙ ȸʅ ȯǞǬǪǷǟ ǦǟǞǵ ǼȽǞÎǩ Ɓ ȼǷǙ ʅȡøʂ ǗǦȶÊǷ 2500 ǞȾǪȩʂ ǞŒǞȮè ǻǼʒ ȷǞõʂ
ȷǞǯǵǞǣ ȼĔǟǙ ǾǹǙ ǬĔǵ ÛǞȶǞǣ Ž ʔǞÎʅ Ž ȷǞǪǟǞǵ 1963 ӯǞʒ ğǞȾʂ ȼǷǚʐ ǦǞǣʂɉǟ ȻǾȽ ȯŸǹ
Ž ʒèǟʂ ǒǞǣʂ ǼȞǣ ôǞʈǟ ʔǞǪǹǟ ·ǞĔǞĔǟʐǣ Ž ôǞʈǟ ǞÛǬǪǟǟ ȷǙ ǼȞǣ ǥǼȞǪʈǟ ğǞǞɍʐǟǟ ȸʅ
Ž ÛǦŸǩǞȩ ǞȾŸõ ǨǷǞõ ÛğɍǞǵ 6 ȸʒ ɳĔŸǦǪǟǟ Ź ǞɳǼǞʒ Û1968 ӯǞʒ ʔøǪǵ 1963 – 1962
ÈǞǷ Ž ǦĔǟǞǪǟǟ ǦǞÊǟǟ Ž ɁǞǹǙ ğɍǞǵ 9 ÂĔĔǬ Ź ·ÂĔĔǞĔǪǞǙ ʅĔŸȩǙ Ž ǞǞĔǟǼƒ āǞȩ ǞĔǞĔǟʐǣ ȯǞƽ
ǯøǞǹ ÛǞǦɳǞǣǞÎǩʐõ ʔǞÎǪÊʅ Ž ǦòǞǹ ǦĔǝǞǣʂ ǦĔƵǙ ğǟǣ ǦĔìǞʐ 1971 ӯǞʒ ǨǭǼǵ ·ǦŌÛǞʈǟ
ȸʅ ¯ ǞèɍʔȶШ ǞõǾǩ ɄøǪǟǟʂ ¯ ǦǞʐǞÎʈǟ ǦĔìǞǞǟǟ ȻǾȽ ǨǞǟǘǩ · ôǞʈǟ ȸʅ ǦǷʐùʐʈǟ ǦŌÛǞʈǟ
Ž ǟÂĔǟǞǩøʐʐ ǥǼŸǣ ğøǟǟ ȒǞǞǬ ǦǦǟǞù ɄȽ index case ǦǟǟǼǟǟ ǦǟǞΣǟ ·ǦŸǩǞȩ ǞȾǞʅ 5 ÛğɍǞǵ 6
ʔǞÎǪÊʈǟ ƂǙ ǨŸǹǻǙʂ ǨȑǞʅ Ǽȩʂ ǗɁʂǼȞǟǟ ȸʒ ǞǞøǞǬǩ ǼǱʐǩ ȸȮǩ Ɓ ǬĔǵ ÛƙǣǦȞùǞǬʅ
ǨǷǞõʂ ÛʔǞÎǪÊʈǟ Ž ǞȾĔÛǟǞƯ ƙǣ ǦǞʐǷǞǪ ğɍǞǵ 4 ǨǭǼǵ ÛǞǦɳǞǣǞÎǩʐõ ƂǙ Ǟőǻʐʒ ǼǞʒ
ǼǵǙ ǦǯǱ ǴǪǞǣ ӯǞĔŌǟǟ ǒǞǞǪǙ ȼȞǦòǙ dzǞǱ pathologist ğǞĔȓǟǞɳǙ ƁǞʒ Ž ǦȞǣǟø ǦǟǞǵ ōǞǞȽ
·ǞǞǞȞȒǟǟ

ǨȞȓʐǩʂ ÛǞɳʐõǞǞ ʅĔŸȩǙ Ž ǦĔʐǞȓǙ ğɍǞǵ 4 ǨǭǼǵ ˙1971 ȸʅ ɄøǷǞǯǟǟ ƵÔǞǟǟ ȯŸǹ
ğɍǞǵ ʒǟøǘǣ ôǞʈǟ ǻǞʒ 1975/1ʂ 1974/12 ɃǞȾì Žʂ ÛǞĔǞĔǟʐǣ ȯǞƽ ʔÔȩǙ Ž ǞȒǞǙ
·ɃøʐɳǞʅ ʅĔŸȩǙ Ž ʂǻøʐĔȮǞǞǟǟ ǦǞǞȩ Ž ƙǩǞʐʂʂ

ǨǦǪǙ ·ÂĔǞǪǞɍǙ ʅĔŸȩǙ Ǜèʂ ȯǞƽ Ž ǞǞĔǟʂǼƒ ǥǼŸǣ Ž 1994/6 ǞȾÎǟǟ Ž ǦĔìǞʐ ǨǭǼǵ
ȒǞǞʅ ɄŌǣ ÛʅȾǞʅ ǦǪè ğǞʅ ÛǦŸǝǞʒ ȸʅ ǒǞȒʒǙ ǦȞǦè Ž ǦĔʐÂøǞǟǟ ʐǣʐ ÎǩǞʅ ʔƥ ÒĔǺÎǩ
ȮǱø ƎĔòǙ ˙ȷǞǪĔʐǞȓǙ ȷǞǪǟǞǵ Ǩʐ ǞȞǪèǟ ˙1994/9 ǞȾÎǟǟ Ž ·ǥǞĔΣǟ ǼĔȩ ʔŸʒ ǦǟǟǼǟǟ ǦǟǞΣǟ
Ƀʒǟøǟ ŌɳǞʒ ƎĔòǙʂ ÛȸǞǼȞǞʅ îǞǺìǘǣ ȼÛǣǞǞ Ǟʅ ōǞǞȽ ȷǙ ȣǞȞǞ ȷǙ ȷʂǻ ǞǞĔǟʂǼƒ Ž ÌĔȞǞ

[illegible] .(1994)

[illegible] *Calomys* [illegible] (%35 [illegible]) cricetids [illegible] .(Jahnson *et al.,* 1978) [illegible]

[illegible] .*Calomys callosus* [illegible] 1977 [illegible] .(1982

[illegible]

[illegible] 2 – 1 [illegible] 5 [illegible] °41 – 38 [illegible] (%30 [illegible]) [illegible] 10 [illegible] 6 [illegible] %50 [illegible] (%50 [illegible] %30) [illegible] .9 [illegible] 5 [illegible] furrows [illegible]

[illegible]

[illegible] cricetid [illegible] .(Johnson, 1981)

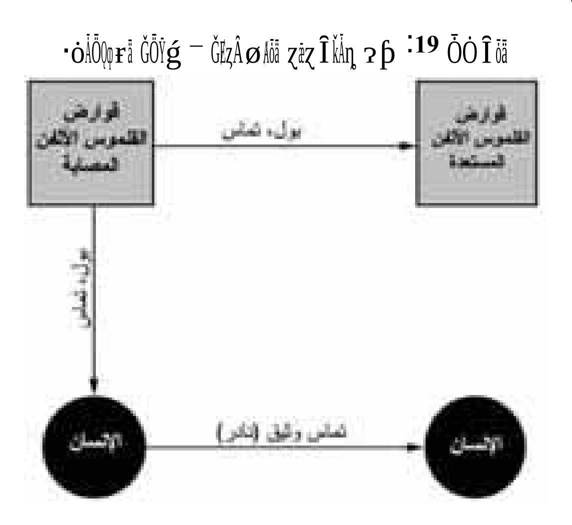
[illegible] (19 [illegible]) [illegible] *Proechimys guyannesis* [illegible] 122 [illegible] %24 [illegible] *Poechimys* [illegible] DDT [illegible] 1959 [illegible]

... [9] ... [5] ... [17] ... [13]

... [25.000] ...

.(Johnoon, 1975) ...

... [19] ...



... (MARU) ...

... [9] ...

6 – 3

Vero

(Chin, 2000)

3.000

60

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MARBURG VIRUS DISEASE ƵƥǋǴƥǅǶ Ƨ ǋƥǐƺ Ɗƹǭ

ICD-10 A98.3

.green monkey disease ÀȒǹɉǟ ǡÀÀÊÀǒǟ ǒǟǻ ÛǦÆźÂøÀǒǟ ǦÆŌÀÀźɉǟ ɂȶΣǟ ˙ğȀźǻǟÀţǟ

Ǧèş ƘÀǒǟ ÈÀǄ БǗ ɄȶǪÀ ȧÀÛǒǟ ǻÀÀƞ ƙƨǟ ɃşÀǿ ǡşƘź Ûȟǿźǟǿ Ȁƞ ǡşƘź ˙ğÀƐǤÊǒǟ ǦźÀȑǗ – ǦŸÆÔÀǒǟ ȻǾȽ ȸȶȒǪǩ ÛFiloviridae ǦÆÛƐ Ɩǟ ğÀèşƘÀǒǟ ǦŸÆÔź Û*filovirus ǦÆÛƐ Ɩǟ*
ȼǟ ÙǦǨÀÀ ɃǾǒǟ Û(Reston ɉźǪÊÀǿ ǦÀǿǣ ÀÀȶȒǪƞ) ɍźǤÀǗ ǡşƘź – ȟǿźǟǿ Ȁƞ ǡşƘź БǗ 1.000 – 700 ş ÀÀÛę ÛÀÀǪƞźɸÀɸ 80 ÈÆŌÀş ÀƘǰǒ ȯÀȮȉɉǟ ǻÆȞǪƞ ɉźÀƘÀǒǟ ·ğƘǤǒ ǦǄǿÆǣ ·ÀɍźǕ ÀǪƞźɸÀɸ

Ž 1967 ȳÀȝ Бşɉǟ ğÀȶŸǒ ȟǿźǟǿȀƞ ǡşƘź ǒǟǻ ÂÆƞ ˙ǫşÆΣǟş ŽǟÀ8ƨǟ ţǟźǪǒǟ ɄøǪǒǟ ǦÀÀÆţǟ ȴèǟ ȸƞ ȼƧǟ ǾǹǗ Æęş ÛÀÀƘǤèş ǻǟÀ8ŸǣşÛ ÛÀÆɸÀţǖǣ ğǿźÀȮɸǟÀźş ȟǿźǟǿȀƞ ȸÀǾǒǟ ğǟƎǪÅţǟ Ž ƙŸƞÀȞǒǟ Ž ȏÀţǟ ÀƬȚÀ ·ğÀƞ ȯşɉ ȣÀȞǪèǟş ȏÀȶţǟ ŌƞÀȞǒǟ ÀƬƐź ǻÀÀǪèǟ *Cercopithecus ɄøǣźƐǪɉǟ ǳşǻÀǕǒǟ)* ǦÆŌÀÀźɉǟ ǒǟÀȒƖǟ ÈƐɸÀÊÀǒǟ ǒÀȊǵǗ ȝƞ ǟźŸƞÀȞǩ ɉÀǬ ÛǦÆǒşǗ ǦǒÀǵ 20 ǨǪÆǵ ·ÀƬ ɃźŸȮǒǟ ǰƐÊÀǒǟ ţǿǟÀƞ şǗ ÀƬȶÊǄ Ōǟźèş (*aethiops*
ɂȑÀţǟ ǰÊɸ şǗ ȳǻ ȝƞ ǡÀȶǪǒǟ ǦǄƐǪɸ ǦÀźɸÀǪ ğɍÀǵ [5] ğÀƬş ˙Ōǣ БǗ ǦźÀȑǗ ·ŸǨÀę ÀƬÀƞ [7]
ÈƐɸÀÊÀǒǟ ǨǨǗ ·ɄÊÀƨǟ ǡÀȶǪǒǟ Ǝȝ ǨŸŌǪǟ ȤşÆȞǒǟ ɉǗ şÆǤ ǦèǻÀè ǦǒÀǵ Žş ÛƙƐǒşɉǟ ȸƞ ÀǣşǿşǗ БǗ ǨÀƕȉş ǟÆÀȡşǗ Ž ÀǄźƐǰ ğƘǕ ǦŌÛÀƞ ȸƞ ȤşÆȞǒǟ ǿÆÔƞ ǨɸÀǰ ɄøǪǒǟ
·ğÆÀȡşǖǣ ɄøǣÀǪÀȝ

ǦǒÀΣǟ ǨɸÀǰ ·ɂȑÀţǟ ÆǵǗ ğÀƞş ÛÀÆŌÀÀźǗ ǡźǄ Ž 1975 ȳÀȝ ǦÀÀȊǣ ğɍÀǵ [3] ȸȝ ȠŸǂ ɉÀǪǒÀΣǟ ÀƞǗ ÛÀȒÀÀƞ ǴǤÔÀ ɉǗ Ōǥę ƙȝźǤèǗ ğÆƞ ɃźǟÀǤƨǟ Ž ŌŌÀǨ ÀÆǒǟÀǪèǗ ÀȞƕÀè Бşɉǟ ·Бşɉǟ ǦǒÀΣǟ ȝƞ ǡÀȶǪǒǟ ǦǄƐǪɸ ȤşÆȞǒÀǣ ÀǪƐǒǗ ÆŌź (Ǧȑ Àư ǨɸÀǰ ÀƵǟÆǵǗ) ɉÀÀǹɉǟ ɂŸȝ ɉÀǰ ɉǗ ǻÆƷ ɉǗ Ōǥę ƙȒÀÀţǟ ÆǵǗ ğÀƞş ÛÀÆÆǰ ǡÀǭ Ž 1980 ȳÀȝ ɉÀǪǒÀǵ ǨǪÆǵ
Ž ǦŸǨÀę Ƙǭ ǦǒÀǵ ȸȝ ȠŸǂ ·1987 ȳÀȝ ÀÆÆǰ Ž ȝÀǹǗ ǦŸǨÀę ǦǒÀǵ ǨǪÆǵ ·ÈƐɸÀÊÀǒǟ ȝƞ ǡÀǭ
.(Chin, 2000) 1999 ȳÀȝ ǦŸǨÀę ğɍÀǵ ǫŸǪş Û1987 ȳÀȝ ǦÆùǟÀŌƩÆǒǟ ź8ɸźȮǒǟ ǦÀǿźƬȐ
16: 1 ğǟǿÀÆȝ ȝƞ ğŸȝÀÀƞ [7] ÀȉÀǤƞŸǒǟ ɄȝÀţǟ ȨǒüǪǒǟ ȳÆÅǪèǟ ǴÊƞ ȣÀȞǪèǟ ˙ÀÀƘǤǒ Ž

et al., 1982) 481 128:1 499 64:1 (Saluzzo et al., 1982)

(WHO, 1984)

9 – 4 %29

1967 9 – 7 5 – 3 %100

[illegible] 136 [illegible] 4 [illegible] (Johnson *et al.*, 1982) [illegible]

[illegible] 1967 [illegible]

[illegible] index case [illegible] (vectoral [illegible]

[illegible] Vero E6 [illegible] Vero [illegible] 10^{-7} [illegible]

[illegible]

[illegible]

[illegible] (CDC, 2000) [illegible] (Simpson, 1978) (overshoe [illegible]) [illegible]

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MAYARO FEVER ǋƀƑĭƑǅ ĂǅƟ

ƒ ǋƴǤƑǤ ƕǁǋƨǅ ǌƀƍƈ ƕĭƳǋ ƕĭƨǋƀĭƷ ƖƑĭǅƟ **ICD-10 A92.8**

ICD-10 A92.8 Other specified mosquito-borne viral fevers

.Uruma Àɳȿøȿ Ɂƀ ːğÀźåäÀţä

ǤÀȿÀÀōɉä ǤèȿƘÀöä ÈÀƨ ɄʈǪÀÀ ƘŎä ɃȿÀɸø âȿƘɀ ÛȿøÀÀɳ âȿƘɀ ːğÀǤǤÊöä ǦəÀÁÛöä ğÀèȿƘÀöä ǦÝÔɀ Û(ğÀèȿƘÀöÀæ ǦöɀŐÀţä ǦèȿƘÀöä ȡɳ A Ǧɜɀʈ Őä) *alphavirus* .(ÀǤɸɀȣɸɀȮǤì Ɂƀ ÀȚɸä) ɄȮǤÝƧ ǦæÀɖ Ɂƀ ŌɳÀĤæ ǦÝÔä ĘǤǭȿ ɀȽȿ ÛTagoviridae

ǦÊɸÀÀöä ÀɸÀÀɀɖȿ ÀǤǤɳɀöɀõȿ ŐÀäƎöäȿ ÀÆÀǤöɀæ Ž ȿøÀÀɳ âȿƘɀ åÀÀǪèä ːŽäÀȣƨä ţäɀǪöä ǥÀǄŽÀȚţä øɀǤÛöä ȡɳ ŌöØõȿ ÛɀõÀæɀǩȿ äÆÀÀÀǩȿ ÿÀÀƘèȿ ÛÀʈÀæȿ Û(Talarmin *et al.,* 1998) âȿƘÀöä ɉÛ ȿÆǤ ːǦəÀæȿ ǦǄǅɀöȿƘè ğÀģɀÊɳ ÆÊģȿ ·ǥÆĤǪţä ğÀÀɼɀöä Ž ÀɸÀÀÂɀö Ž ·ÀȒÀÛ ȿƘǤöäȿ ÀɸÀÀɀɖȿ ÀȮÀøÀǪèɀõ Ž øȿÆÀ

[illegible] %50 [illegible] %10 [illegible] 50 [illegible] 1955 [illegible] 1955 – 1954 [illegible] "jungle fever" [illegible] %10 [illegible] 400 [illegible] 1978 – 1977 [illegible] %15 [illegible] 4.000 [illegible] %20 [illegible] .(LeDuc *et al.*, 1981) [illegible]

[illegible] 1962 [illegible] %6.3 [illegible] .(Talarmin *et al.*, 1998) [illegible]

[illegible] 3 [illegible]

[illegible] 55 [illegible] 1978 – 1977 [illegible] %20 [illegible] .(Pinheiro *et al.*, 1981) [illegible]

[illegible]

[illegible] 9.000 [illegible] *Haemagogus janthinomys* [illegible] 9 [illegible] 26 [illegible] 736 [illegible] 62 [illegible] 1: 82 *Haemagogus janthinomys* [illegible] *Haemagogus* [illegible] 368:1 [illegible] *janthinomys* *Mansonia* [illegible] *Culex* [illegible] *Sabethes* [illegible] *Psorophora* [illegible] *Aedex* [illegible] .(Hoch *et al*., 1981) [illegible]

[illegible] 1.200 [illegible] %1.3 [illegible] 585 [illegible] %5.6 [illegible] (*Callithrix argentata*) [illegible] 119 [illegible] (%27) 32 [illegible] howler [illegible] %29 [illegible] (*Icterus spurious*) Oriloe [illegible] (*Proechimys*) [illegible] (*Oryzomys* [illegible]) [illegible]

[illegible] (*Nectomys*) [illegible] (Hoch *et al.*, 1981).

[illegible] (Junt *et al.*, 1999).

[illegible] (Talarmin *et al.*, 1998).

[illegible]

[illegible]

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MEASLES

ICD - 10 B05

(Morbilli, Rubeola)

Measles virus ... Paramyxoviridae ... *Morbillivirus* ... (Carré ...) distemper ... (rinderpest ...).

... %90 ...

.(Beneson, 1990)

2000 ... 817.161

777.000 ... 40 – 30

(%90 ≥)

100 ... 50.000

1999

2000 ... 34.971

%50

.(WHO, 2002) 2000 ... 36.306 ... 1981 ... 300.000

537 ... 2001

D6 ... 1990 ... %99

1995

2001 ... 2001 – 1997

indigenous

2001

.(CDC, 2002) 2002

(*M. mullata*)

[illegible] (*Colobus guereza*) colobus [illegible] (*M. fascicularis* (*Saguinus Oedipus*) [illegible] (*Presbytis cristatus*) [illegible] .(*Callithrix jacchus*) [illegible] .(Montrey *et al.,* 1980) [illegible] .(Soave, 1981) %100 [illegible] 170 [illegible] (*Presbytis entellus*) (Langur [illegible] 195 [illegible] .(Bhatt *et al.,* 1966) [illegible] Kalter *et*) [illegible] (*Papio*) [illegible] 87 [illegible] 65 [illegible] .(*al.,* 1967 [illegible] 3 [illegible] 1985 [illegible] 3 [illegible] 5 [illegible] 3 [illegible] (%41.3) 36 [illegible] 7 [illegible] 3 [illegible] 87 [illegible] .(Welshman, 1989) [illegible] (84) [illegible]

[illegible] 18 – 8 [illegible] – [illegible] 7 – 4 [illegible] 100.000 [illegible]

1990)

(Karstad, 1981)

P.)

31 24 (*cristatus*

9 – 6

(Montrey *et al.*, 1980)

(*C. guereza*) colobus

(Hime *et al.*, 1975)

87 63

ventral

7

.(Welshman, 1989)

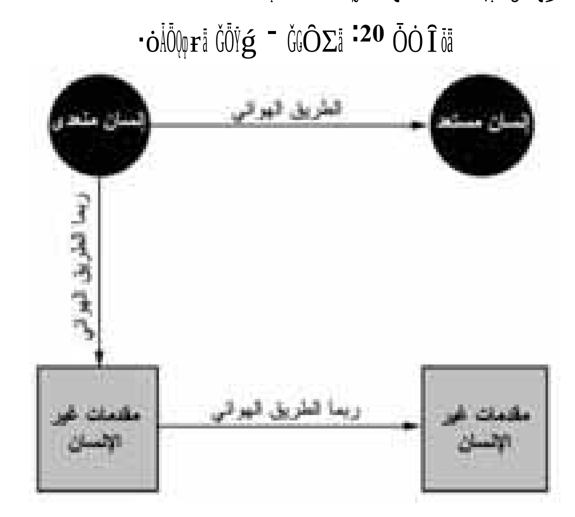
:(20

.(Chin, 2000)

4

Yamanouchi *et* (*al.*, 1969

Welshman,) (1989



Potent

[illegible] 1980 [illegible] 14000 [illegible] 500000 [illegible] (1982) [illegible] lapse [illegible] .(Black, 1984) [illegible]

[illegible] .(Yamanouchi *et al.,* 1969) [illegible]

[illegible] Edmonston [illegible] 1981) [illegible] .(Karstad, [illegible] .Welshman,) (1989 [illegible]

[illegible]

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MURRY VALLEY ENCEPHALITIS

ICD-10 A83.9

ICD-10 A83.8 Other mosquito-borne viral encephalitis

134 (X) 1918 – 1917

.1974 1971 1951

1.000 – 500

11 %89 %7 %89 %86

1974 .(Hawkes *et al.*, 1981)

2.873

.(Hawkes *et al.*, 1993) 1981 1991

1972 .(Hawkes *et al.*, 1993) enzootic kunjin [1]

18 .1991

[1] .(liehne *et al.*, 1976) .(Doherty, 1981)

[illegible] *culex* [illegible] %78 [illegible] *annulirostris* [illegible] sentinel [illegible] .(Smith *et al.,* 1991) [illegible]

[illegible] marsupials [illegible]

[illegible] 10 [illegible] (%40 [illegible]) [illegible]

[illegible] .(Gard *et al.,* 1977) [illegible]

[illegible] 1974 [illegible] (*Ardea novaehollandiae*) Heron [illegible] .(Kay *et al.,* 1981) [illegible]

[illegible] 15 [illegible]

feral

1974

(Gard *et al.*, 1976)

(Kay *et al.*, 1981)

Andrewes, C.H., H.G. Pereira. *Viruses of Vertebrates*, 3rd ed. Baltimore: Williams & Wilkins; 1972.

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NEWCASTLE CONJUNCTIVITIS[1]

ICD-10 B30.8 Other viral conjunctivitis

pneumoencephalitis

.paramyxovirus 1 [illegible] pseudofowl pest ([illegible]) [illegible] *Newcastle* [illegible] (avian parainfluenza virus 1) 1 [illegible] *Avulavirus* [illegible] (9 [illegible] 2 [illegible]) [illegible] 8 [illegible] protype [illegible] .mumps [illegible] pathogenic types [illegible] inculated [illegible] (pathotype [illegible]) lentogenic [illegible] velogenic [illegible] Mesogenic [illegible] viscerotropic velogenic [illegible] .(exotic

[illegible] 40 [illegible] 8 [illegible] .(Russell and Alexander, 1983) [illegible]

[illegible]

[illegible] 40 [illegible] 17 [illegible] 90 [illegible]

[illegible] %64 [illegible]

[illegible] 1926 [illegible] panzootics [illegible] 1970 [illegible] 1968 – 1966 [illegible] 1971 – 1970 [illegible] epizootic [illegible] 56 [illegible] 3 [illegible] 1971 [illegible] 1991 [illegible] episode [illegible] (*Amazona ochrocephala oratrix*) [illegible] Bruning-Fann *et al*.,) [illegible]

.(1992

neurotropic ... 1984 – 1981 ... 1981 ... 23 ... 8 – 6 ...

Pearson *et al.,*) lentogenic ... 90 ...
.(1985

1992 ; 1990 ...

(*Pelecanus erythrorhynchos*) ... [1](*Phalacrocorax auritus*) ...

%50 ... %20 ...

26.000 ...

Wobeser *et al.,* 1993; USDA,) ... .(1992

3.736 ...

[1] cormorant ...

[illegible] 17 [illegible] 67 [illegible] et al., 1986) [illegible] 1999 [illegible] Aust Vet J,) [illegible] .(2000

[illegible] 1932 [illegible] 1930 [illegible] 1964 [illegible] 1999 [illegible] 1932 [illegible] .(Murray, 1999) endemic [illegible]

[illegible] 1970 [illegible] 1927 [illegible] 100 [illegible]

[illegible] 2 – 1 [illegible] 4 [illegible]

[illegible] 4 – 3 [illegible]

[illegible] 15 – 2 [illegible] 6 – 5 [illegible]

- [illegible] velogenic [illegible] %90 [illegible] %10 [illegible]
- [illegible] mesogenic [illegible] %50 [illegible] %10 [illegible]
- [illegible]

[illegible] (4 – 2) [illegible] preponderant [illegible] proventriculus [illegible]

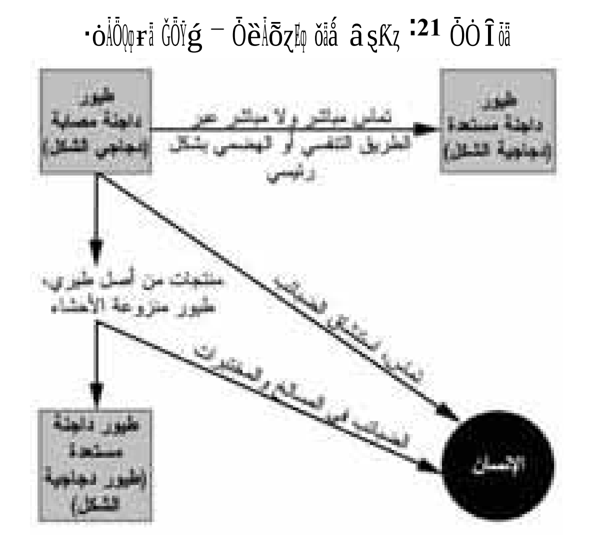
3 – 1 wattle

(21

episodes 1926

(Hanson, 1978)

19 – 15 B1


طيور
داجنة مصابة
(دجاجي الشكل)
تماس مباشر ولا مباشر عبر
الطريق التنفسي أو الهضمي بشكل
رئيسي
طيور
داجنة مستعدة
(دجاجية الشكل)
منتجات من أصل طيوري،
طيور منزوعة الأحشاء
طيور داجنة
مستعدة
(طيور دجاجية
الشكل)
الإنسان

[illegible] panzootic [illegible] (Hanson, 1976) [illegible]

[illegible] 9.446 [illegible] (Pearson and Cann, 1975) [illegible] exotic [illegible] (*Passer domesticus*) [illegible] 3 [illegible] (*Corvus brachyrhynchos*) [illegible] 4.367 [illegible] (%0.76) 33 [illegible] 3.780 [illegible] (%1.01) 38 [illegible] toucan [illegible]

[illegible]

[illegible] , 1975) [illegible]

[illegible]

[illegible] (Hlinak *et al.,* 1992) [illegible]

[illegible] 10 – 9 [illegible] average [illegible] .(Alexander, 1991) [illegible] 6 [illegible]

[illegible] lasota [illegible] Hitchner B1 [illegible] lentogenic [illegible] instilling [illegible] .(Hanson, 1978) [illegible]

[illegible]

ÙøШƐþøĎǁƐ

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OMSK HEMORRHAGIC FEVER [illegible]

ICD-10 A98.1

[illegible] B [illegible] *Flavivirus* [illegible]

[illegible]

[illegible] 600 [illegible] 1946 [illegible] 200 [illegible] 1945 [illegible] (%83.3) [illegible] 1992 – 1988 [illegible] .(Belov *et al.,* 1995) 10 [illegible] 9 [illegible]

[illegible] 7 – 3 [illegible] (40 – 39) [illegible] 12 – 5 [illegible] meningism [illegible] exanthem [illegible]

[illegible] .%2 %1 [illegible]

[illegible] (*Ondatra zibethicus*) [illegible] 3 [illegible] .(Seymour and Yuill, 1981)

[illegible] (*Dermacentor pictus* [illegible] 40 [illegible]

[illegible] (*Ondatra zibethicus*) [illegible] (*Arvicola terrestris*) [illegible] (*Sorex araneus*) shrew [illegible] (*Microtus economus* [illegible] (*Citellus erythrogenus*) [illegible] Seymour and) [illegible]

, 1981

Andrewes, C.H., H.G. Pereira. *Viruses of Vertebrates*, 3rd ed. Baltimore: Williams & Wilkins; 1972.

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OROPOUCHE VIRUS DISEASE

ICD-10 A93.0

Bunyavirus ... 18 ... Simbu ...

1955 ... 46 ... .(Anderson *et al.,* 1961) ... 3 ...

1978 ... 1961 ... 14.000 ... 11.000 ... (1975) ... (1961) ... 165.000 ... .(Pinherio *et al.,* 1981) ... 1978 ... 1980 – 1979 ... .(LeDuc *et al.,* 1981)

... 1981/2 ... 1980/10 ... 1980/6 ... 5 ... %4.2 ... 6 ... 496 ... 650.000 ... 97.000 ... %16.7 ... 1987/12 ... .(Borborema *et al.,* 1982) ... .(Vasconcelos *et al.,* 1989) ... %56 ... .19 ... 10

LeDuc *et al.,* (1981).

(Pinheiro *et al.,* 1981).

(Chin, 2000).

(Berge, 1975).

(Pinheiro *et al.,* 1981) (*Bradypus tridactylus*) sloth (*Alouatta seniculus*) 26 9 (Anderson *et al.,* 1961) (*Cebus* 26 8 *insularis*) %11.9 %1 %2.8 %4.1 Pinheiro *et al.,* (1981).

8 – 4 °40 exanthematic %5 2 – 1 %60 5 – 2

.(Vasconcelos, 1989) 1987

Pinheiro *et al.*,) 1980

.(1982

.(Pinheiro *et al.*, 1981)

:(22

.(Pinheiro *et al.*, 1981)

(*Cebus* .(formicariidae

(Saguinus (*Saimiri*

Coquilletidia venezuelensis

Aedes serratus

hematophagous (*Culicoides*

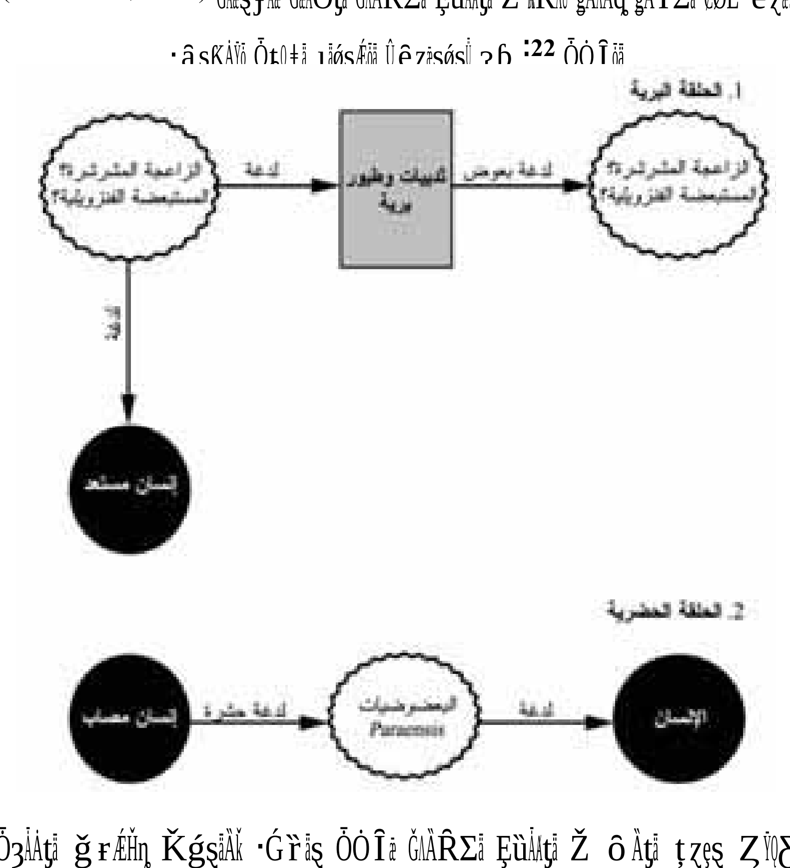
.*Culicoides paraensis*

.(Pinheiro *et al.*, 1982a)

Culex quinquefasciatus

.(Hoch *et al.*, 1987) [illegible]

[illegible] 22: [illegible]



[illegible] %40.6 [illegible] 0 [illegible]

.(Borborema *et al.*, 1982) [illegible]

Paraensis [illegible] 12.500: 1 [illegible] proportionally [illegible]

LeDuc *et al.*,) [illegible]

1981.

paraenris

(Pinheiro *et al.,* 1981)

(Moreli *et al.,* 2002)

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ORUNGO FEVER

ICD-10 B33.3

ICD-10 B33.3 Retrovirus infections, not elsewhere classified

Reoviridae *Orbivirus* 80 – 60

(Tomori, 1978)

60 (Fabiyi *et al.*, 1975) 1972

1.197 %23 (Tomori and Fabiyi, 1976) %24 99 %14 44 %52

Cercopithecus

7 – 3

[illegible] .(Fabiyi *et* al., 1975)

[illegible] Tomori and) [illegible] .(Fabiyi, 1977

[illegible] 1962 [illegible] *Anopheles funestus* [illegible] *A. gambiae* [illegible] *Aedes dentatus* [illegible] .(Tomori, 1978) [illegible] .(Tomori and Fabiyi, 1976) [illegible]

[illegible]

[illegible]

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POWASSAN ENCEPHALITIS [illegible]

[illegible] ICD-10 A 84.8
ICD-10 A84.8 Other tick-borne viral encephalitis

[illegible] *Flavivirus* [illegible][1] [illegible]

[illegible] .(Lvov, 1978) [illegible]

[illegible]

---

[1] [illegible]

1958 ... 27 ... 1998 ...
(Gholom *et al.,* 1999) ...
2001 ... 1999 ...
CDC,) ...
%5 ... (2001
%1 ...
14 ... (Monath, 1979) ...
.(Leonova *et al.,* 1991) ...

... 725 ...
22 ...
%50 ...
Mephitis ... skunk ... %47 (*Canis latrans*)
Arstob *et al.,*) (*Proyon lotor*) ... %10 ... %26 (*mephitis*
... (1986
... (*Spilogale putorius*) ...
.(Johnson, 1987) ...

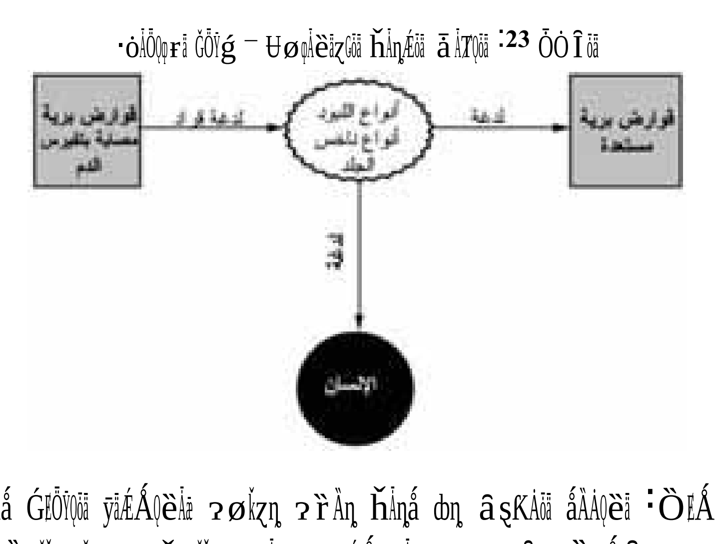
... 13 ...
...
... (Keane *et al.,* 1987) ... 170 ...
... (Artsob *et al.,* 1984) ... %1.1 ...
... *Rodentia* ...

[illegible]

[illegible] 14 [illegible] pleocytosis [illegible] (1991) [illegible]

[illegible] (*Marmota monax*) woodchuck [illegible] 11 – 6 [illegible] (*Didelphis marsupialis* [illegible] 3 – 1 [illegible] (Kokernot *et al.*, 1969) [illegible] *Urocyon*) [illegible] (*cinereoargeteus*.

[illegible] (23 [illegible] *cookei* [illegible] *Dermacentor* [illegible] *Ioaxdes* [illegible] *spinipalpis* [illegible] *marxi* [illegible] *Haemap-* [illegible] *hysalis longicornis* [illegible]



(Ralph, 1999)

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POXES OF MONKEYS

B08.8 ICD-10 B04

ICD-10 B04 Monkeypox; B08.8 Other specified viral infections characterized by skin and mucous membrane lesions

1980 ... 1967 ... 1958 ... 1978 ... (1978 ...).

[illegible] 1958 [illegible] 4 [illegible]

1. MONKEYPOX [illegible]

[illegible] (variola [illegible]) smallpox [illegible] *Orthopoxvirus* [illegible] cowpox [illegible] vaccinia

[illegible] (Hutchinson *et al.*, 1977) [illegible] (Marennikova *et al.*, 1981) [illegible] (Tripathy *et al.*, 1981) [illegible]

[illegible]

[illegible] 1970 [illegible] 1987 [illegible] %95 [illegible] 7 [illegible] 404 [illegible] %93 [illegible] (Benenson, 1990) [illegible] 15 [illegible] 10 [illegible] 4 [illegible] %15 [illegible] %1 [illegible] 130 [illegible] 214 [illegible] 2.510 [illegible] 14 [illegible] 62 [illegible] 22 [illegible]

et al., 1986)

1958 10

2.242

(Arita et al., 1972)

3 7

5 (Foster et al., 1972) 372

10 115

7 6

195 (Breman et al., 1977b)

%8

(Breman et al., 1977a) %21

pangolin porcupine

(Arita et al., 1985; Baxby, 1988)

(Funisciurus anerythrus) 1985

320 ... 24 ... 27 ... 6 ... Khodakevich *et al.*,) ... (*Heliosciurus rufobrachium*) ... .(1987

3 – 2 ... prodromal ... 15 – 7 ... 10 ... 3 ... .(Baxby, 1988)

4 – 1 ... .acanthosis

.(H. rufobrachium F. anerythrus)

6 253 (%6.3) 16

.(Khodakevich *et al.*, 1987)

.(%95)

.Weber and) (Rutala, 2001

.(Weber *et al.*, 2001)

[illegible]

TANAPOX [illegible] .2

[illegible] Poxviridae [illegible] Yatapoxvirus [illegible] yaba [illegible] yaba [illegible]

[illegible] 1962 [illegible] 1957 [illegible] 163 [illegible] Arita and Gromyko,) 1981 [illegible] 1978 [illegible] 1966 [illegible] 23 [illegible] (1982 [illegible] %9.2 [illegible] 1976 [illegible] (Axford and Downie, 1979) [illegible] Jezek *et al.,*) [illegible] 23.4 [illegible] .(1985

[illegible] %30 [illegible] %76 [illegible] 263 [illegible] %15 [illegible] 55 Hall and) [illegible]

[illegible] 67

[illegible] 258 [illegible] %59 [illegible] 4 – 3 [illegible] pruriginous [illegible] Hyperplasia [illegible] (Jezek *et al.*, 1985) [illegible] 6 [illegible]

[illegible] (*Fuscata* [illegible]) [illegible] 8 – 6 [illegible]

[illegible]

[illegible] 3 [illegible] (1985) [illegible] (%57) [illegible] *Mansonia* [illegible] (Jezek *et al.*, 1985) [illegible] (Hall and McNulty, 1967) [illegible]

[illegible]

[illegible]

[illegible] 3

POXES CAUSED BY OTHER YATAPOXVIRUSES

[illegible] *Yatapoxvirus* [illegible] 1966 [illegible] 1965 [illegible]

4 – 2 … epidermal histiocytoma … (Esposito and Nakano, 1991).

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PSEUDOCOWPOX

ICD-10 B08.0

ICD-10 B08.0 Other orthopoxvirus infections

(Pseudovaccina paravaccina).

poxviridae *Parapoxvirus* 160 × 260 (Orf sealpox

addendum

orthopoxvirus

(Nagington *et al.*, 1967)

(Rosenhusch and Reed, 1983)

(Tripathy *et al.*, 1981; Hernández-Pérez and Serpas de López, 1981)

(%13) 358 46

46

Hernández-Pérez and Serpas de López, 1981; Tripathy *et al.*,)

(Kuokkanen *et al.*, 1976) 44 (1981

7 – 5

2 – 0.5 6 – 4

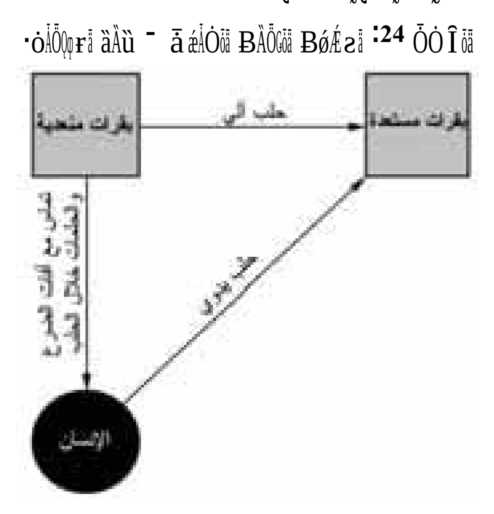
44 10

(Schwartz *et al.*, 1967) (Kuokkanen *et al.*, 1976)

[illegible] (Fenner *et al.,* 1993) [illegible] 10 – 7 [illegible] (Nagington *et al.,* 1967)

[illegible] (24 [illegible]) [illegible] 6 [illegible] (Tripathy *et al.,* 1981) [illegible] 3 – 2 [illegible] Livestock (Schuler *et al.,* 1982) [illegible]

[illegible] 2 [illegible]



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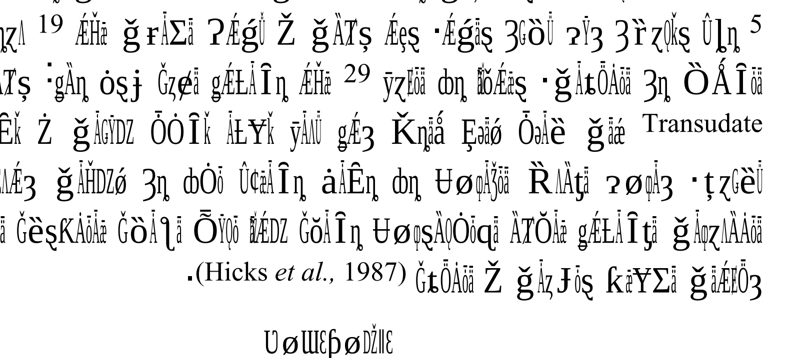
Timoney, J.F., J.H. Gillespie, F.W. Scott, J. E. Barlough. *Hagan and Bruner's Microbiology and Infectious Diseases of Domestic Animals: With Reference to Etiology, Epizootiology, Pathogenesis, Immunity, Diagnosis, and Antimicrobial Susceptibility*, 8th ed. Ithaca: Comstock; 1988.

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Addendum

SEALPOX

Parapoxvirus (*Halichoerus grypus*) 19 5 29 Transudate



(Hicks *et al.*, 1987)

Hicks, B.D., G.A. Worthy. Sealpox in captive gray seals (*Helichoerus grypus*) and their handlers. *J Wildl Dis* 23:1–6, 1987.

RABIES

ICD-10 A82

lyssa [illegible] Hydrophobia [illegible]

[illegible] Rhabdoviridae [illegible] *lyssavirus* [illegible] 75 [illegible] 180 [illegible] (N) [illegible] (G) [illegible] (1 [illegible] (Wunner, 1989)

[illegible] "fixed [illegible]" "street [illegible]" [illegible] 6 – 4 [illegible]

[illegible] .(WHO, 1984) [illegible]

[illegible] kinetic [illegible] .(Díaz Verela-Díaz, 1980) [illegible] .(Wiktor *et al.*, 1980) reactivity [illegible] 8 [illegible] 14 [illegible] .(Whetstone *et al.*, 1984) [illegible] 204 [illegible] 20 [illegible] .(Sureau *et al.*, 1983) [illegible]

[illegible] impression [illegible]

(Barrat *et al.*, 1989)

ecosytem

(Rupprecht *et al.*, 1991) reindeer

epitope (1989)

(*Vulpes vulpes*) 37

(*Alopex lagopus*)

skunks

enzootics

(Smith, 1989)

17 ... 288 ...

(Díaz, *et al.*,1994)

8 ... (N) ...

3 ... 1 ...

3 ... 1 ... 3 ... 1 ...

4 ... 5 ... 2 ...

8 ... 7 – 6 ... (*Tadarida brasiliensis*)

T. brasiliensis ... 8 ... 8 ... 7 ...

Tadarida ...

(*Desmodus rotundus*) ... (Smith, 1989) ...

(V. *vulpes*) ...

Nyctereutes) ...

(Chomel, 1993) ... (*procyonoides*

(Smith, 1989) ...

(*Tragelaphus strepsiceros*) kudu

(Smith, 1989) ...

[illegible] %80 [illegible] %50 [illegible] (G) [illegible] ·G [illegible]

[illegible] *Lyssavirus* [illegible]

– [illegible] :1 [illegible] . (CVS)"challenge virus standard" [illegible]

– [illegible] :2 [illegible] Lagos [illegible]

– [illegible] :3 [illegible] Mokola [illegible] shrew [illegible] (Foggin, 1983) [illegible] (*Crocidura* [illegible]) [illegible]

– [illegible] :4 [illegible] Duvenhage [illegible]

[illegible] (*Eptesicus serotinus*) [illegible] (EBL-1) "European bat lyssavirus" [illegible] 550 [illegible] 104 [illegible] (EBL-2) *Myotis* [illegible] 4 [illegible]

.(Bourhy *et al.,* 1992) 5 [illegible]

[illegible] Kotonkan [illegible] Obodhiang [illegible] Culicoides [illegible] (*Mansonia uniformis* [illegible] epitopes [illegible]

[illegible] (Foggin, 1983) [illegible]

[illegible]

[illegible] tropism [illegible] (OBOD) [illegible] *Cuolicoides* [illegible]

[illegible]

[illegible]

[illegible] 47 [illegible] 3 [illegible] 0 [illegible] 1938 [illegible] 1.326 [illegible] 1991 [illegible] 1.135 [illegible] 1984 [illegible] 1989 – 1980 [illegible] 283 [illegible] 5 [illegible] 280) 1979 – 1970 [illegible] 2000 – 1980 [illegible] 1999 – 1990 [illegible] PAHO data,) (30) [illegible] (41) [illegible] (66) [illegible] (2000 [illegible] (%35.4) [illegible] 10 [illegible] (%58.7) [illegible] .(PAHO data, 2000) (%5.4) [illegible] (%76.2) [illegible]

[illegible]

[illegible] %100 [illegible] 453.769 [illegible] 933.260 [illegible] 1999 [illegible] 106 [illegible] 1991 [illegible] %33 [illegible] .(PAHO data, 2000)

[illegible] :5 [illegible] .2000 – 1980 [illegible]

2000	1999 – 1990	1989 – 1980	[illegible]
18	65.9	79.0	[illegible]
3	10.3	11.1	[illegible]
7	5.2	14.3	[illegible]
3	21.6	21.5	[illegible]
4	26.6	26.4	[illegible]
1	2.2	5.7	[illegible]
1	4.8	5.0	[illegible]
0	0.5	0.8	[illegible]
0	0.1	0.8	[illegible]
1	4.2	3.4	[illegible]
0	0	0	[illegible]
26	40.9	84.8	[illegible]
11	19.7	32.4	[illegible]
0	0	0.5	[illegible]
0	0	0	[illegible]
2	8.9	16.4	[illegible]
6	7.0	8.0	[illegible]

3	2.8	5.4	[illegible]
0	1.0	2.1	[illegible]
0	0	0	[illegible]
4	30.6	62.0	[illegible]
1	2.9	6.2	[illegible]
0	0.5	0	[illegible]
0	1.2	4.0	[illegible]
1	1.2	2.2	[illegible]
6	2.7	1.0	[illegible]
1	0	0	[illegible]
5	2.7	1.0	[illegible]
67	167.5	70.4	[illegible]

.(PAHO) SIRVERA [illegible]

[illegible] 106 [illegible] 1991 [illegible] 21.248 [illegible] .(WHO data, 1991) [illegible] 6 [illegible] .2000 [illegible] 1990 [illegible]

[illegible] 6: [illegible] .2000 – 1990 [illegible]

2000	1999 – 1995	1994 – 1990	[illegible]
255	1.229	2.649	[illegible]
0	252	1.115	[illegible]
66	101	162	[illegible]
79	502	708	[illegible]
54	247	574	[illegible]
56	125	90	[illegible]
57	466	336	[illegible]

4	10	61	[illegible]
0	0	1	[illegible]
53	456	274	[illegible]
0	0	0	[illegible]
761	1.072	669	[illegible]
179	3.729	623	[illegible]
…	7	1	[illegible]
0	0	0	[illegible]
35	138	92	[illegible]
126	163	144	[illegible]
18	52	342	[illegible]
0	19	44	[illegible]
0	0	0	[illegible]
244	3.669	4.803	[illegible]
94	97	107	[illegible]
24	34	28	[illegible]
31	27	28	[illegible]
39	36	51	[illegible]
1.590	3.912	9.187	[illegible]

… [illegible]

[illegible] SIRVERA (PAHO).

[illegible] 1991 [illegible] 18.634 [illegible] %90 [illegible] (WHO data, 1991) [illegible]

[illegible] 1940 [illegible] (*V. vulpes*)

[illegible] (A. lagopus)

[illegible] 58 [illegible] (Pseudalopex griseus)

[illegible] Durán and Favi,) [illegible] %8.62 [illegible] (1989

[illegible] (Herpestes auropunctatus) [illegible]

[illegible] Beran,) [illegible] (Winkler, 1991) [illegible] (1981 [illegible] %80 [illegible] 104 [illegible] 1984 [illegible] 1971 [illegible] (%80) [illegible] (1984 – 1980 [illegible] (Procyon lotor) [illegible] (Marmota monax) [illegible] (Rattus [illegible] 3 [illegible]

[illegible] Rupprecht *et al.*, 1991 [illegible]

[illegible] 1953 [illegible] *Eptesicus serotinus* [illegible] 104 [illegible] 550 [illegible] *Pipistrellus* [illegible] *Myotis* [illegible] 23 [illegible] 1986 [illegible] (*E. serotinus*, *Pipistrellus* [illegible]) 1989 [illegible] 249 [illegible] (Netherlands epidemiologic data, 1990) [illegible] 1 [illegible] 13 [illegible] 530 [illegible] (G) [illegible] 8.645 [illegible] 647 [illegible] (Oelofsen and Smith, 1993) Krebs *et al.*, [illegible] 1992 [illegible] 1993 [illegible] (1993 [illegible] 3 [illegible] 17 [illegible] (Chomel, 1993) [illegible]

1 ... *Desmodus rotundus, Diphylla* ... 3 ... *Diaemus youngi*, *ecaudata*, ... *Desmodus* ... (*D. rotundus*) ... livestock ... 7 ... 1999 ... 1991 ... 1990 ... livestock ... 50.000 ... 44 ... 1929 ... 1953 ... 180 ... 43 ... 9 ... 1990 ... 4 ... 29 ... (Nehaul, 1955) ... (López *et al.*, 1992) ... 636 ...

[illegible] 21 [illegible] 20 [illegible] 2000 [illegible] 8.505 [illegible] .(PAHO data, 2001) [illegible] 100 [illegible] 182 [illegible] 1992 [illegible] 1945 [illegible] (%2.11) [illegible] .1971

:1999 ،1991 ،1990 [illegible] :7 [illegible]

1999	1991	1990	[illegible]
31	–	1	[illegible]
6	0	0	[illegible]
41	…	…	[illegible]
2.628	1.781	1.871	[illegible]
0	0	0	[illegible]
0	45	51	[illegible]
2	3	7	[illegible]
7	…	…	[illegible]
6	…	…	[illegible]
20	25	26	[illegible]
5	17	10	[illegible]
3	26	23	[illegible]
6	4	11	[illegible]
108	…	…	[illegible]
3	1	2	[illegible]
96	4	15	[illegible]
95	62	48	[illegible]

49	20	32	[illegible]
0	0	0	[illegible]
30	198	128	[illegible]
3.136	2.186	2.225	[illegible]

[illegible] ...

[illegible]: *Bull Epi Surv Rabies in the Americas* 31:30.2000.

[illegible] 8 – 2 [illegible] 8 [illegible] 10 [illegible] 90 – 20 [illegible] 6 [illegible] (Bernard and Fishbein, 1990). [illegible] 500 [illegible] %10 [illegible] %4 [illegible]

[illegible] excitation [illegible] hydrophobia. [illegible] 6 – 2 [illegible] (Bernard [illegible]

[illegible] (and Fishbein, 1990 [illegible]

[illegible]

[illegible] dumb [illegible] furious [illegible]

[illegible] 10 [illegible] prodromal [illegible]

[illegible] 3 – 1 [illegible]

[illegible] 11 – 1 [illegible]

oulou fato [illegible]

[illegible] furious [illegible] Negri [illegible] (Beran, 1981) [illegible] *Oulou fato* [illegible] 4 – 2 [illegible]

[illegible] 25 [illegible] 150 [illegible] paretic [illegible] priapism [illegible] tonic-clonic [illegible] snout [illegible] spittle [illegible] emaciation [illegible] 3 – 2 [illegible] 10 – 8 [illegible] 5 – 2 [illegible] – [illegible] –

[illegible]

[illegible] Canidae [illegible] Skunk [illegible] coyote [illegible] raccoon [illegible] mongoose [illegible] 100 [illegible] 10 [illegible] 6 [illegible] 9 – 4 [illegible] 4 [illegible]

[illegible] 18 [illegible]

myocytes

axons (Baer, 1991)

centrifugally

.centripetally

germinal

14 3 1

9 4

[illegible] 13 [illegible] 16 [illegible] 8 [illegible] 7 [illegible] 10 [illegible] .(Fekadu *et al.,* 1982) [illegible] 3 – 1 [illegible] 14 [illegible] 2 [illegible] 1 [illegible] .(Beran, 1981) [illegible]

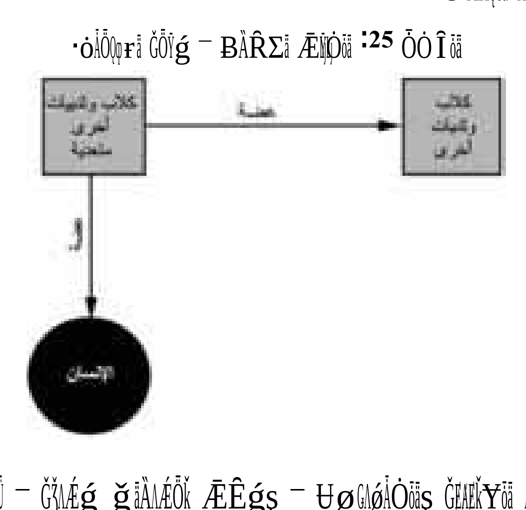
[illegible] lagomorphs [illegible] %90 [illegible] (25 [illegible]) [illegible] .rabid [illegible] 13 [illegible] 3 [illegible] 2 [illegible]

[illegible] %75 [illegible] %60 [illegible]

[illegible]

Fishbein and Robinson,) [illegible] %40 [illegible] .(1993 [illegible] (Helmick, 1983; Bernard and Fishbein, 1990) [illegible] %20 [illegible]

[illegible] 25 [illegible]



370.000 [illegible] 260.000 [illegible]

[illegible] 854) [illegible] 3.295 [illegible] 100.000 [illegible] 15 [illegible] %43.8 [illegible] %47.9 [illegible] (Szyfres *et al.*, 1982) [illegible]

[illegible] (Diesch *et al.*, 1982) [illegible]

[illegible] "abortive [illegible]" [illegible] 114 [illegible] 1.015 [illegible] cerebroneutralization [illegible] (Díaz *et al.*, 1975) [illegible]

[illegible] 39 [illegible] 47 [illegible] 8 [illegible] 10 [illegible] .(Fekadu and Shaddock, 1984) anamnestic

[illegible] 1.083 [illegible] 5 [illegible] bitch [illegible] 305፣ 169፣ 42 [illegible] 16 [illegible] Fekadu *et al.*, 1981; Fekadu) [illegible] .(*et al.*, 1983 [illegible] .(Fekadu, 1991) [illegible]

[illegible] impression [illegible]

[illegible]

[illegible] ecosystem [illegible] (*Urocyon cinereoargenteus*, *Vulpes fulva*) [illegible] (*Mephitis mephitis* [illegible]) [illegible] %50 [illegible] 1992 [illegible] Raccoons [illegible] .(Krebs *et al.*, 1993; Chomel, 1993) [illegible] (*Procyon lotor*) [illegible] (*Alopex lagopus*) [illegible] enzootics [illegible] .(Beran, 1981) [illegible]

[illegible]

[illegible] renewal [illegible] %70 [illegible]

[illegible] (%30) [illegible] 1.675 [illegible] 498 [illegible] 4 [illegible] (Everad *et al.*, 1981) [illegible] (Bigler *et al.*, 1983) [illegible]

[illegible]

[illegible] 10 [illegible] 17 [illegible] 18 [illegible] 99 [illegible] 24 [illegible]

(Lord *et al.,* 1975)

(Frio Cave)

Tadarida brasi-) (Constantine, 1971)

(*liensis*

(Winkler *et al.,* 1972)

dams

cannibalism

reagents

conjugate

(WHO, 1984)

(WHO, 1992)

kit

[illegible] %90 [illegible] %80 [illegible]

[illegible]

[illegible] immunogenic [illegible] capacity [illegible] (Budzko *et al.*, 1983) [illegible] (Díaz, 1983) [illegible] (Nicholson and Prestage, 1982)

[illegible]

neuroblastoma [illegible] (Na CI300) [illegible] 15 – 10 [illegible]

(WHO 1992)

(Escobar Cifuentes, 1988) 13 – 8

40

(1993)

(Beran, 1991)

(Meslin, 1989)

culling

%80

(LEP

(HEP

(ERA

(SMB)

CEPANZO data,)

(Fuenzalida-Palacios)

(1980

[illegible] Flury (Sikes, 1975) [illegible] 3 [illegible] %80 [illegible] (PV-BHK-EL) [illegible] BHK [illegible] %89 [illegible] 25 [illegible] 12 [illegible] (Larghi *et al.*, 1979) [illegible] 3 [illegible]

[illegible] 3 [illegible] 3 [illegible] %70 [illegible] %100 [illegible] (PAHO data, 2000) [illegible]

[illegible]

[illegible]

[illegible] (Hanlon, 2002b) [illegible]

[illegible] .2 [illegible]

terrestrial [illegible]

[illegible] ERA [illegible]

[illegible] PV-BHK-EL [illegible] SMB [illegible]

[illegible] diphenadione [illegible]

[illegible] ("mist [illegible]

[illegible] gas chromatography [illegible]

%1.17 (Burns and Bullard, 1980)

Vaseline warfarine

valid

Everard *et al.,* 1972; Everard *et*) (*al.,* 1981; Cavey *et al.,* 1978

WIRAB ERA

Street Alabama Duffering (SAD) (BHK

Vnukovo-32 SAD-B19 SAD-Bern ERA

innocuous

SAD mutant SAG

[illegible]

([illegible]) [illegible] SAD-Bern [illegible]
[illegible] [1.3] [illegible]
[illegible] [20] [illegible] SAD-B19 [illegible]
[illegible]
[illegible] ([illegible]) range [illegible]
[1989] [illegible] SAG [illegible] [250.000] [illegible]
[illegible] .(WHO, 1992) [illegible] [1991] [illegible]
[illegible] SAG-2 [illegible]
[illegible] (RVG) [illegible] .(Hanlon *et al.,* 2002a) skunks
[illegible] .vaccinia [illegible]
[illegible] pathogenicity [illegible]
[illegible]
[illegible] ([illegible]) [illegible]
[illegible] [1990] [illegible] [1988] [illegible]
[illegible] .(WHO, 1992) [illegible]
.(Aguilar-Setein *et al.,* 2002) [illegible]

[illegible] [1955] [illegible] [1950] [illegible]
[illegible] .[1966] [illegible]
[illegible] [1.200.000] [illegible] [1991] [illegible] [1986]
[illegible] .[1993] [illegible] [1992] [illegible]
[illegible]
[illegible] .(WHO, 1994) [illegible]
[illegible]
[illegible]

[illegible] RVG [illegible] SAD-B19 [illegible] [3] [illegible] 6 [illegible]

[illegible] [4] [illegible] SMB [illegible] immunogenic [illegible] 10 [illegible] × 1.700 [illegible] encephalitogenic [illegible] 12 [illegible] 10 [illegible] booster [illegible] 0.5 IU/ml [illegible] 6 [illegible]

[illegible] (HDCV) [illegible] (WHO, 1992) [illegible] 28 [illegible] 7 [illegible] 0 [illegible] %100 [illegible] inoculation [illegible] %1 [illegible] Turner *et al.,* 1982; Dreesen *et al.,*) [illegible] (1982.

[illegible] 46 [illegible] 108 [illegible] (HDCV [illegible] 10.000 [illegible] 11) [illegible] anaphylaxis [illegible] 9 [illegible] 108 [illegible] 21 [illegible] 2) [illegible] I; 87 [illegible] – [illegible] III [illegible] (CDC, 1984) [illegible] 12 [illegible]

[illegible] inoculated [illegible] %0.1 [illegible] %70 [illegible] %40 [illegible]

[illegible] 1.500.000 – 500.000 [illegible]

[illegible] Vero [illegible] .(Sureau, 1988; Larghi, 1991; Fishbein and Robinson, 1993) [illegible] 784.026 [illegible] 1992 [illegible] 1.000 [illegible] 240 [illegible] .encephalitogenic [illegible]

[illegible] SMB [illegible] 3 [illegible] (6 [illegible] 0 [illegible] 24 [illegible]) [illegible] 7 [illegible] 60 [illegible] 20 [illegible] 10 [illegible] 24 [illegible] 14 [illegible] .(Guarnera *et al.*, 1994) [illegible] immunogenicity [illegible] .(WHO, 1992)

[illegible] ·30, 14, 7, 3, 0 [illegible] 1 – 1 – 2 [illegible] ·21 [illegible] 7 [illegible]

[illegible] ·lyophilized [illegible] ·(Lin, 1990) [illegible]

[illegible] heterologous [illegible] IU 40 [illegible] ·homologous [illegible] IU 20 [illegible] 90, 20, 10 [illegible]

[illegible] ·([illegible] 22 [illegible]) Fermi

[illegible]

%25 %15

34 1.2 10.000

1980 1970 SMB

3 13 141

(Acha, 1981) 11

HDCV

(Boe and Nyland, 1980)

(Bernard *et al.*, 1982)

enzootic

10

Escherichia coli (GP)

(Yelverton *et al.*, 1983)

microcarrrier ɃÀΊƒ ŌŋÅǵ ÀŧƯ Ž ĝÀŧϘÊŋ ĞÀζŸǹ ȓζÛǹ ţǿà ȸŋ ȷȼä ĞÀζĖΣä ĞφÅÖϘä ·ÅŘÀÜ ĞÀŸÒϘöä ĞŸĔŸęş âşΚÀöä ȸŋ ĝΚĞõ ĞĔŧõ Àζζʌ Æę ɃØöäş Ûfermenter

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RIFT VALLEY FEVER

ICD-10 A92.4

.Enzootic hepatitis

Bunyaviridae *Phlebovirus*
100 – 90
nucleocapsids
.symmetry

1931
100.000 1951 – 1950 episode
20.000
1976 – 1974 .1969 1956 1953
4
8
.(Shimshony and Barzilai, 1983)

[illegible] 1977 [illegible] 200.000 [illegible] 20.000 [illegible] 400 [illegible] 600 [illegible] %25 [illegible] %1 [illegible] %3 [illegible] .(Brés, 1981) [illegible]

[illegible] livestock [illegible] (%19.3) [illegible] (%56.6) [illegible] (%35.7) [illegible] Hoogstraal *et al.*,) [illegible] (%31.4) [illegible] :1978 [illegible] (1979 [illegible] %12.1 [illegible] %18.8 [illegible] %28 [illegible] .(Malik, 1981) [illegible] %20.4 [illegible] %17.5 [illegible] %20 [illegible]

[illegible]

[illegible]

[illegible] 1987 [illegible] 337 [illegible]

49 ... 88 ... %65 ... 173 ... 64 ... (WHO, 1988) livestock ... 1.264 ... Walsh,) ... 224 ... .(1988

12 ... 1993 ... 41 ... 35 ... 27 ... 6.000 ... 500 ... 24 ... .(WHO, 1994)

1991 – 1989 ... 1993 ... .1998

2000 ...

882 ... 2001 ... (Balkhy and Memish, 2003) ... 124 ... 490 ... (%11) 121 ... 1.087 ... (%26) 136 ... M ... (CDC, 2000) ... (%3) 17

... 6 – 4 ... 4 ... 12 ... 1976 – 1974 ...

... (Meegan *et al*., 1981) ...

... 15 – 5 ... pleocytosis ... 80 ... 15 ... 5 ... (Meegan *et al.*, 1981) ...

[illegible]

[illegible] 72 – 20 [illegible] %95 [illegible] %20 [illegible] greasy [illegible]

[illegible] 30 [illegible] *Culicoides* [illegible] 6 [illegible]

[illegible] 17 [illegible] (1983) [illegible] (*Simulium* [illegible] 14 [illegible] *Aedes* [illegible] (*mcintoshi* [illegible] *Vexan* [illegible] *dalzieli* [illegible] 1993 [illegible] *Culex* [illegible] *caspius* [illegible] *Culex* [illegible] *Culex pipiens* [illegible] *perexiguus* [illegible] 1977 [illegible] *Caballus* [illegible] *theileri* [illegible] *poicilipes* [illegible] Diallo *et al.*, 2000; Fontenille *et al.*,) [illegible] *Ochraceus* .(1998

[illegible] *Eretmapodites* [illegible] (Lefevre, 1989) [illegible] 7 [illegible]

[illegible]

[illegible] livestock [illegible] (Swanepoel, 1981) [illegible] *dambos* [illegible] livestock [illegible] (Davies, 1985) [illegible]

[illegible]

[illegible] *lineatopennis* [illegible] (OIE, 1983) [illegible]

[illegible]

[illegible] .(Yedloutschnig *et al.*, 1981) [illegible] 21 [illegible] 11 [illegible] 3 [illegible] .(Brown *et al.*, 1981) [illegible] .(Hoogstraal *et al.*, 1979) [illegible] (300 [illegible]) [illegible] .1977 [illegible] .1976 [illegible] .(Shimshony Barzilai, 1983)

[illegible] 3 – 2 [illegible] %27 [illegible] .(Morvan *et al.*, 1992) [illegible]

[illegible] (Drosten *et al.*, 2002; Espach *et al.*, 2002; Stall *et al.*, 2002) [illegible] seeding [illegible]

[illegible] Wesselsbron [illegible]

[illegible] 1978 [illegible] (Shope *et al.*, 1982) [illegible] 2 – 1 [illegible]

0.40 0.05) 0.80

.teratogenic

Caplen *et al.,*) Fluoracil–5 –5

MP-12 .(1985; Hubbard *et al.,* 1991

immunogenic

MP-12

virulence

13

sentinel

Lupton *et al.,* 1982;)

(House *et al.*, 1992

1979

[illegible] .(House *et al.*, 1992) [illegible]

[illegible]

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ROCIO ENCEPHALITIS ǋĭǀǋþǴ ƵƑǅǭǁƐ ƒƑǇǂǁƐ

ICD-10 A83.6 Rocio virus disease ǋĭǀǋþ ƧǋþĭƷ ƅƐǭ **ICD-10 A83.6**

Ǵʒʓȶǚä) *Flavivirus* ǥǞǻȎţǐ ǴèşƘȦöä ȄȀǅ БǗ ɄȶǬȀ ƙǑä ɃşȦǿǿ âşƘʓ˙ğȀǴǴÊöä

Flaviviridae [1]

1975/3 emerging zoonosis

821 1978/6 1975/3

%10 20

(Iversson, 1980).

153 (%22.2) 34

1.007 (Zonotrichia capensis)

(de Souza Lopes, 1978a).

12

%50

%20

%20

(Rosemberg, 1977).

%75

[1]

(de Souza Lopes *et al.,* 1986b)

1:2 (Iversson, 1980)

(de Souza Lopes, 1986) 30 – 15

Entomological

A. *serratus* *Aedes scapularis*

2.230 (Forattini, 1981)

23.896

47

(de Souza Lopes *et al.*, 1981) (*Psorophora ferox*)

competence

ferox

(Mitchell and Foratini, 1984)

(Mitchell *et al.,* 1981)

1975

1976 100.000 55

1977 100.000 90

.(Iversson, 1980) 1978

.(Iversson *et al.*, 1982)

.nonanthropophilic

.(Iversson, 1980)

6

.(de Souza Lopes, 1986)

Romano-Lieber and) (MAC-ELISA) M

.(Iversson, 2000

ŬøɰƐþøĎǁƐ

Forattini, O.P., A. de Castro Gomes, J.L. Santos, E.A.B. Galati, E.X. Rabello, D. Natal. Observações sobre atividade de mosquitos Culicidae em mata residual no Vale do Ribeira, S. Paulo, Brasil. *Rev Saúde Publ* (São Paulo) 15:557–586, 1981.

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hɱǂɰŀƴǁƐ hƨNjβĭƻǁƐ DžƳ !ɰFdžǁƐ ƌƑyĎŽŬƐNj ƔƍyĎŽǁƐ ƒƑNJŧǁƐ
ROTAVIRAL GASTROENTERITIS

hɱǂɰŀƴǁƐ hƨNjβĭƻǁFǴ ƌƑyĎŽŬƐ ƒƑNJŧǁƐ ICD-10 A08.0
ICD-10 A08.0 Rotaviralenteritis

ȯÀÄüɟä ÆĀʒ åÄΣä ŏÄĤŋɟäş ğÆĤţä āÄƮǫöä ÛƟŸÀÛöä ŏÄĤŋɟäş ğÆĤţä āÄƮǫöä ˸ğÄȥåäÀţä ŌDzĤöä ȯÄƮèǓ ÛÆÈöȥöä ŌDzĤöä ȯÄƮèǓ ÛĞĤĒȑÀöä ÀÀäÄÄʅäş ȷŸŧΣäş ǿȥƮţäş ȯȥDzĤöäş ·ĞĤĒȑÀöä ȷäÄÄÀöä ȯÄƮèǓ ÛNebraska ÄȮëäƎÆä

ĞŸĒÔȥ Û*Rotavirus* *ĞĦŸDzĤöä* *Ğèş*K*Àöä* ÈÆDZ ȸŋ ĞĦŸDzĤöä ğÄèşKÀöä ˸ğÆĞĞÊöä БǓ A ȸŋ ĞĦŸDzĤöä ĞèşKÀöä ƱŁ ÈÄƨä ȸŋ ğÂÆŧţä ţäȥφɟä ·Reoviridae ĞÄȥÀÀöä ğÄèşKÀöä

tentative G F E

orthoreovirus Orbivirus

rota

60 spokes

11

VP6

%99

A serogroup

Gómez) ; G B

(and Grinstein, 1991; Paul and Lyoo, 1993

A

11 A

VP6 serotypes

VP4 VP7

electropherotypes

polyacrylamide

A 1

(Nakagomi *et al.*, 1990)

(Steele and Ivanoff, 2003; Kirkwood *et al.*, 2002; Cunliff *et al.*, 2001)

Herrmann and Blacklow,) (1991

(1991a)

plaque

feline

[illegible] (K9) [illegible] (cat [illegible] 97 [illegible] (FR-I [illegible] (AU-1 [illegible] constellation [illegible] Nakagomi and Nakagomi,) [illegible] (Flores *et al.*,1986) [illegible] (1991 [illegible]

[illegible] (Hoshino *et al.*, 1983b) 3 [illegible] gnotobiotic [illegible] (Holmes, 1979) [illegible] (Schwers *et al.*, 1982) [illegible] Rodríguez *et*) *al.*, [illegible] (1978

Woode) (Murakami *et al.,* 1983)

(and Bridger, 1975

(Hoshino *et al.,*1983a)

(McNulty *et al.,* 1980)

(McNulty., 1991)

1973

[illegible] %50 [illegible] .(Davidson *et al.,* 1975) [illegible] 5 [illegible] – [illegible] – [illegible] 6

[illegible] 5 [illegible] 3 [illegible] 5 [illegible] 8 [illegible] .(Yolken and Murphy, 1982) [illegible]

[illegible] 1989 [illegible] (1990 – 1989) [illegible] 23 [illegible] 99 [illegible] %20 [illegible] 48.035 [illegible] %6 [illegible] %36 [illegible] .(CDC, 1991) [illegible] %20 [illegible] 5 – 0 [illegible] 557 [illegible] 266 [illegible] %4.1 [illegible] 291 [illegible] %29.2 [illegible] %96.6 [illegible] 13 [illegible] 11 [illegible] 392 [illegible] .(Cardoso *et al.,* 1992) [illegible] %27 [illegible] 1987 [illegible] 1986 [illegible]

[illegible] (Gomwalk *et al.*, 1993) [illegible] %25.4 [illegible] 665 [illegible] 288 [illegible] (%15.3) 44 [illegible]

[illegible] 10 – 5 [illegible] (Kapikian *et al.*, 1980) [illegible] %40 [illegible] %20 [illegible] %60 [illegible] %40 [illegible] 5 [illegible] 3 [illegible] %14 [illegible] %7 [illegible] (PAHO, 1982) [illegible] %45.3 [illegible] Mata *et al.*,) %13.4 [illegible] .(1983

[illegible]

[illegible] %60 [illegible] .(PAHO, 1982) [illegible]

%100 %90

%38

coronavirus

%90 (WHO, 1980)

Woode,) .(1978

14 – 3

6 – 4

3 – 1

33 (Woode, 1978)

33 6 %50 %57.5

36

%50 %88.9

%55.6 *Cryptosporidium*

[illegible] 39.4 [illegible] %11.1 [illegible] %3 [illegible] .(Bellinzoni *et al.,* 1990)

[illegible] %70 [illegible] .(Takahashi *et al.,* 1979)

[illegible] 7 [illegible] %25 [illegible] %30 [illegible] °39 [illegible] %50 [illegible] 10 [illegible] .(Stals *et al.,* 1984) [illegible] 5 [illegible] 2 [illegible]

[illegible] 5 [illegible] nursing [illegible] .(Yolken and Murphy, 1982)

[illegible] absorbent [illegible] crypt [illegible] erosion [illegible]

[illegible]

[illegible] 18 [illegible] gnotobiotic [illegible]

[illegible] 8 – 6 [illegible] 30 [illegible] Fenner *et al.*,) [illegible] .(1993

[illegible] 9 – 5 [illegible] $10^{11} - 10^{7}$ [illegible] .(Woode, 1978) [illegible] .(Holmes, 1979) [illegible] 10 – 5 [illegible] .(Gillespie and Timoney, 1981) [illegible]

[illegible]

[illegible] (Hopkins *et al.*, 1984) [illegible] (PAHO, 1982) [illegible] Hermann and Blacklow, 1990; Stals *et al.*, 1984 Santosham *et*) [illegible] 30 [illegible] (*al.*, 1983 [illegible] 12 [illegible] 9 [illegible] (Fragoso *et al.*, 1986) [illegible]

[illegible] (WHO, 1980) [illegible]

[illegible] 8 [illegible] 5 [illegible] 3 [illegible] immunoelectroosmophoresis [illegible]

erythroimmunoassay

VP6

Gómez and) electropherotype

reliable (Grinstein, 1991

(Chen *et al.*, 1999)

(Haikala *et al.*, 1983)

screening

(Sato *et al.*, 1981) (MA 104)

A M

B

acid .ethylenediaminetetraacetic

.(Saif *et al.,* 1983) incomplete Freund

parenterally

5 – 3

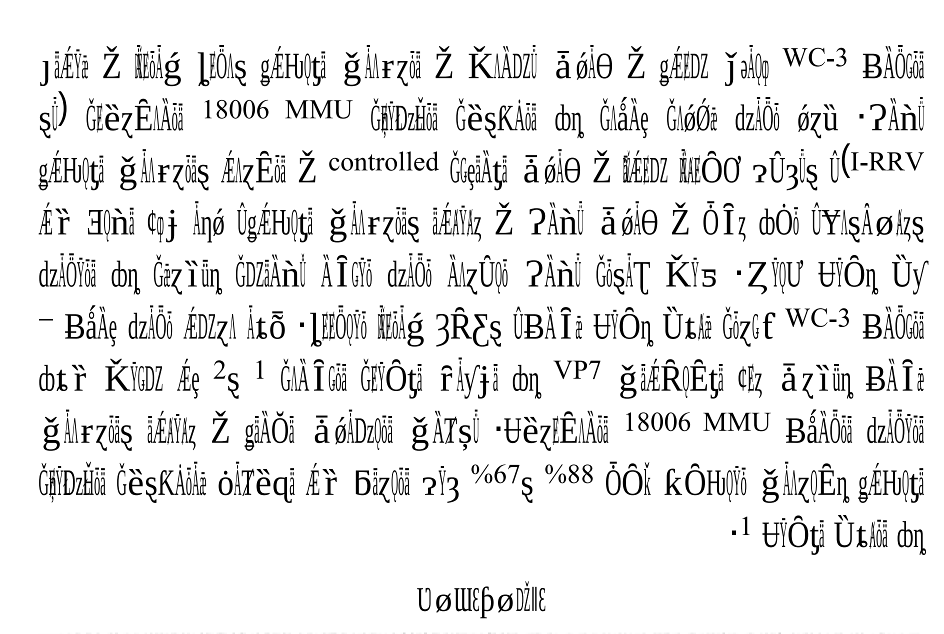
10 – 7

.(Paul and Lyoo, 1993)

A

6 – 5

RIT 4237



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RUSSIAN AND CENTRAL EUROPEAN SPRING-SUMMER ENCEPHALITIS

ICD-A84.0

A84.1

ICD-10 A84.0 Far Eastern tick-borne encephalitis (Russian spring-summer encephalitis); A84.1 Central European tick-borne encephalitis

biphasic

Casals *Flavivirus* Powassan Langat Omsk

[illegible]

[illegible] .(Hou *et al.*, 1991) *Ixodes ovatus* [illegible]

[illegible] 1951 [illegible] 660 [illegible] .(Monath, 1982) [illegible] 100.000 [illegible] 20 [illegible] 2.000 [illegible] 8 [illegible] 3 [illegible] %80 [illegible] (1989) [illegible] *persulcatus* [illegible] *Ixodes* [illegible]

[illegible] 12 [illegible] 2.922 [illegible] %14.6 [illegible] 6 [illegible] *Clethrionomys* [illegible]

Kozuch *et al.*,) [illegible] *I. ricinus* [illegible] *glareolus* [illegible] 15 [illegible] 5 [illegible] (1990 Kahl and) [illegible] %0.9 [illegible] (Radda, 1988 .(Chambouris *et al.*, 1989) [illegible] 429 [illegible] %8.6 [illegible] 206

[illegible] %20 [illegible] .(Asher, 1979)

[illegible] 10 – 7 [illegible] %2 [illegible] %1 [illegible]

[illegible] %0.2 [illegible] %2 [illegible] (McNeil *et al.*, 1985 [illegible] Kunz) [illegible] 7 – 4 [illegible] 20 – 8

5 6 – 5 .(Gresíková and Beran, 1981)

rear paresis chattering (lockjaw %12 tetraparesis %100 .opisthotonos .(Poppensiek, 1986)

nidal (26

Ixodes .I. ricinus persulcatus Haemaphysalis concinna Dermacentor H . japonica douglasi %6

4 – 2

(Varma, 1989)

10

(Gresíková and Beran, 1981)

(dormouse

26

vehicle

[illegible] (Gresíková and Beran, 1981) [illegible]

[illegible] 4) [illegible] Roggendorf *et*) [illegible] (*al.,* 1981; Hofmann *et al*., 1983

[illegible] 20 %99 [illegible] (Brandt 1990, Kunz *et al.,* 1980 [illegible] Kunz) [illegible]

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SINDBIS FEVER [illegible]

[illegible] ICD-10 A92.8
ICD-10 A92.8 Other specified mosquito-borne viral fevers

.Ockelbo [illegible] Karelian [illegible]

[illegible] *Alphavirus* [illegible] .Togaviridae [illegible] .(Lundstrom *et al.,* 1993) [illegible]

[illegible]

30

.1961 5

%20 .(Niklasson, 1988)

.(Guard *et al.*, 1982) 4

Mayaro Chikungunya

(Tesh, 1982) Ross River O'nyong-nyong

.Barmah

.ornithophilous

[illegible] *C. annulirostris* [illegible] *Culex univittatus* [illegible] *Culicines* [illegible] *C . pseudovishnui* [illegible]

[illegible]

[illegible]

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[illegible]
SPONGIFORM ENCEPHALOPATHIES OF ANIMALS AND MAN

[illegible] ICD-10 A81
ICD-10 A81 Slow virus infections of the central nervous system

[illegible] Lumbar prurigo [illegible] "scrapie" [illegible] Creutzfeldt-Jakob [illegible] Kuru [illegible] 1986 [illegible]

[illegible] (Gajdusek, 1977) [illegible]

[illegible] astrocytosis [illegible]

[illegible] vacuoles [illegible] neuropil [illegible] (Tuler, 1991) [illegible]

[illegible] determinant [illegible] (Brown et al., 1991) [illegible]

[illegible] scrapie-associated fibrils [illegible] stain [illegible]

infectious [illegible] Unconventional [illegible] amyloidosis [illegible] slow virus degenerative [illegible] prion.

[illegible] filterable [illegible]

(1 [illegible] 25 [illegible] 30 – 50 [illegible]

(2 [illegible] "virine" [illegible]

.(Kimberlin, 1992)

(3 "viroid"

(4 "prion" 1982

proteinaceous

(PrP)

(PrPc)

.(Prusiner, 1992; Oesoh *et al.,* 1991) PrPsc

.(Prusiner, 1992)

.(Kimberlin, 1992)

DISEASES OF ANIMALS

Scrapie .1

enzootic ovine paraplegia

---

[1] translation

.Lumber Prurigo [illegible] rida [illegible]

[illegible] (Eklund and Hadlow, 1981) [illegible] .(Fernándes *et al.,* 1978) [illegible] mouflon [illegible] .(Detwiler, 1992) [illegible] .(*Ovis musimon*) [illegible]

[illegible] Suffolk [illegible] %50 [illegible] 460 [illegible] 11 [illegible] 340 [illegible] %5 [illegible] Hampshire [illegible] Cheviot [illegible] 9 [illegible] .(Gloyd, 1990) [illegible] .(Eklund and Hadlow, 1981) [illegible] 50 – 30 [illegible] Stamp,) [illegible] %15 [illegible] %10 [illegible]

[illegible] (1980 [illegible] 15.000 – 10.000 [illegible] 1978 [illegible] %10 [illegible] vacuolization [illegible] 15 [illegible] (Detwiler, 1992) [illegible]

[illegible] %17 [illegible] 0.31 [illegible] (Morgan and Nichols, 1991) 1988 [illegible] 0.5 [illegible] 1987

[illegible] 4 – 1 [illegible] PrP [illegible] (Aiken and Marsh, 1990) [illegible] *maladie tremblante* [illegible] prurigo [illegible]

[illegible]

diencephalon mesencephalon .(Eklund and Hadlow, 1981)

P

.(Kimberlin, 1981) Allele

subpopulation

(Hadlow *et al.*, 1982)

3 – 1

.(Kimberlin, 1981)

6 transfer

6 – 5

[illegible] 26 [illegible] 6 [illegible] .(Foster *et al.,* 1992)

[illegible] livestock [illegible]

[illegible] 4 – 2 [illegible]

Detwiler,) [illegible] .(1992 [illegible] Sigurdarson,) [illegible] .(1991 [illegible]

[illegible] 100 [illegible] 50 [illegible] .(Stamp, 1980; Marsh, 1983) [illegible]

[illegible]

[illegible]

Transmissible Mink Encephalopathy [illegible] .2

[illegible] 1985 [illegible] (Marsh and [illegible] (Hadlow, 1992 [illegible] (12 – 7 [illegible]) [illegible] .(Kimberlin, 1981) [illegible]

[illegible] aggression [illegible] hyperesthesia [illegible] .(Marsh and Hadlow, 1992) [illegible]

[illegible] .(Marsh and Hadlow, 1992) [illegible]

Chronic Wasting Disease of Deer [illegible] .3

Cervidae [illegible] 1967 [illegible] (*Cervus elaphus nelsoni*، *Odocoileus hemonius hemonius*) [illegible] 4 [illegible] 60 [illegible] %90 [illegible] 1981 – 1970 [illegible] ferret [illegible] (*Mustela vison*) [illegible] (*Saimiri sciureus*) [illegible] Marsh,) *Cervus canadiensis* (wapiti [illegible]) [illegible] (1983. [illegible]

[illegible] (Bovidae [illegible] – [illegible] (Williams and Young, 1992). [illegible]

Bovine Spongiform Encephalopathy [illegible] .4

[illegible] Mad cow [illegible]

[illegible] 1986 [illegible] 1988 [illegible] 1985 [illegible] 1989 [illegible] 1990 [illegible] 7.000 [illegible] .(WHO, 1994) [illegible] 92.000 [illegible] 1994 [illegible] 20.000

[illegible] 181.368 [illegible] 2001/10/21 [illegible] 437 [illegible] 1.890 [illegible] 178.194) [illegible] (1) [illegible] .(OIE, 2002a) [illegible] 698 [illegible] 149 [illegible] (1) [illegible] (138) [illegible] (8) [illegible] (2) [illegible] (65) [illegible] (2) [illegible] (3) [illegible] (54) [illegible] (875) [illegible] (1) [illegible] (515) [illegible] (106) [illegible] (1) [illegible] (5) [illegible] (628) [illegible] (30) [illegible] (1) [illegible] (1) [illegible] (1) [illegible] .(OIE 2002b) (413) [illegible] .(OIE, 2001c) (2) [illegible]

[illegible] .humpback [illegible] %93 [illegible]

[illegible] %95 [illegible] Kimberlin,) [illegible] 2 – 1 [illegible]

[illegible] 8 [illegible] 2.5 [illegible] (1992 [illegible] 10 [illegible]

[illegible] 1986 [illegible] index case [illegible] (Wilesmith *et al.,* 1988) [illegible] 1982 – 1981 [illegible] 70° [illegible] 8 [illegible] .(Wilesmith, 1991; Kimberlin, 1992)

[illegible] recycling [illegible]

1988 1982 – 1981

.banned

1991 enzootic

22 5 4

3 1992

.(WHO, 1994) 4 1993

WHO,) .(1994

enzootic

1993 1990 250

117 ... (WHO, 1992)

... encephalon ...

(Kimberlin, 1992) ... %90 ... obex ...

... 1991 ... 3 ... 26 ... (1991 ...) ... (WHO, 1994) ...

5.

5. Spongiform Encephalopathies in Other Animal Species in the UK

... 21 ...

1991

5 – 4

5

.(Wyatt *et al.,* 1991) locomotor

nodding

Perikaryon

nyala

.(Kudu (*Tragelaphus strepsiceros*)

.(Kimberlin, 1992)

HUMAN DISEASES

1. Kuru .1

:ICD-10 A81.8

ICD-10 A81.8 Other slow virus infections of the central nervous system

%80

[illegible] Fore [illegible] 1975 [illegible] 1957 [illegible] 2.500 [illegible] .(Gajdusek, 1977) [illegible]

[illegible] Fore [illegible] *Kuru* [illegible] "tremor" [illegible] .(Lehrich and Tyler, 1991)

[illegible] 30 [illegible] 4 [illegible] .(Benenson, 1981)

[illegible] .(Eklund and Hadlow, 1981)

[illegible] cannibalism [illegible]

Gajdusek,) .(1977

Creutzfeld-Jakop Disease .2
ICD-10 A81.0

.(Chin, 2000) 1 0.5 250 200 117 1993 1990 14 1983 1978 46 1978 178 .(Taratuto *et al.,* 1989) 1989 1981

Brown and) 1985 – 1972 87 1982 0.9 (Gajdusek, 1991 (Desgrandchamps *et al.,* 1994) (31.3)

(Kahana *et al.*, 1974).

(Brown, 1991) PrP 200 codon (Goldfarb *et al.*, 1990) 20

(Brown, 1991).

(Will *et al.*, 1996) 1996

amyloid

(Hope, 1998).

(Collinge, 1996).

75 50 18 30 – 27 dementia 5 – 2 (Benenson, 1990) %15 (Benenson, 1990)

8 (Cochius *et al.,* 1990) 13 76 5.5 (Gibbs *et al.,*1993) CDC,) 8 30 (1993

[illegible] .(Gajdusek, 1997) [illegible] .(Marsh, 1983) [illegible]

[illegible] Saimiri) [illegible] (sciureus [illegible] .(Gibbs *et al.*,1980) [illegible]

[illegible]

3. Gerstmann-Sträussier-Scheinker Syndrome

ICD-10 A81.8 Other slow virus infections of the central nervous system

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ST. LOUIS ENCEPHALITIS

A83.3 ICD-10

[illegible] Flavivirus [illegible] [1] [illegible]

[illegible] [3] [illegible] (Bowen *et al.*,1980) [illegible] (Monath *et al.* ,1980) [illegible] mapping (Trent *et al.*,1981) topotypes [illegible]

[illegible]

[illegible] (Monath, 1979) [illegible] 25 [illegible] (Spence, 1980) [illegible] 1953 [illegible]

---

[1] [illegible]

.(Monath, 1979)

1933

CDC,) 1.000 500

35 1976 – 1975 .(1993

.1974 2.194

1990 .1978 26 1977 132

.(Day, 2001) 11 226 1991

70 2001

.(Jones *et al.*, 2002) 3

19 1974

.%20 51 100.000

22 1975

1962

109.6 1962 100.000 4.291

1964 100.000

%8

%34

85:1 9 800:1

.(Monath, 1982) 60

.(Monath, 1979)

%50 %3 3 %66 %33

(Sabattini *et al.*,1985)

(Walton, 1992)

aseptic

Brinker) (and Monath, 1980

60 %87 %56 1991 5 28

(Bleed *et al.*,1992)

(Marfin *et al.*, 1993)

21 4

2.261 %10 %5

50 .1968 1955

.(Luby *et al.*, 1969) %30

65 (36.3)

1962

%9.8 %22

.(Bond *et al.*,1965)

(27

Culex salinarius .ornithophilic

.enzootic

C. tarsalis

(flood

C. quin- ... C. pipiens ... quefasciatus

1964 ... %20

(Passer domesticus)

363

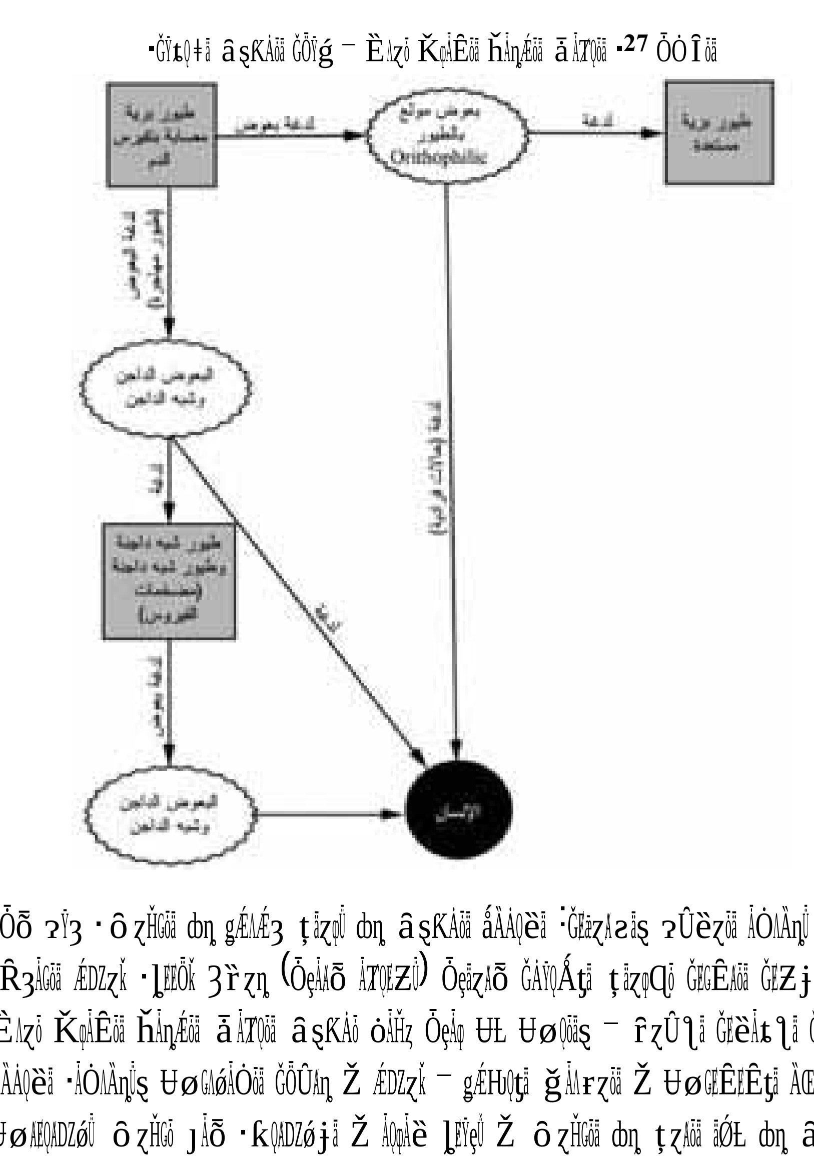
11 ... %25 ... 33

25

(Turdus migratorius) ... (Passer domesticus)

(McLean *et al.*,1993)

1962 ... C. nigripalgus


Orthophilic

[illegible]
.(Mitchell *et al.,*1980) [illegible]
[illegible]
[illegible] .(Monath *et al.,*1980)
[illegible] (Mitchell *et al.,*1980) [illegible]
[illegible]
Mitchell *et al.,*) [illegible]
[illegible] .(1980
[illegible] (Sabattini, 1985; de Souza Lopes *et al.,* 1979) [illegible]
[illegible] *Mansonia* [illegible]
(1985) [illegible] *Wyeomyia* [illegible] *Sabethes*
Mus) [illegible] *Calomys* [illegible]
[illegible] (*musculus*
[illegible]
.(McLean *et al.,*1985) [illegible]

[illegible]
.(Bailey *et al.,*1978) [illegible]

Francy *et al.*,)

(1981

.(Shroyer, 1990)

.(Hardy *et al.*,1984)

C. salinarius

.*Aedes taeniorhynchus*

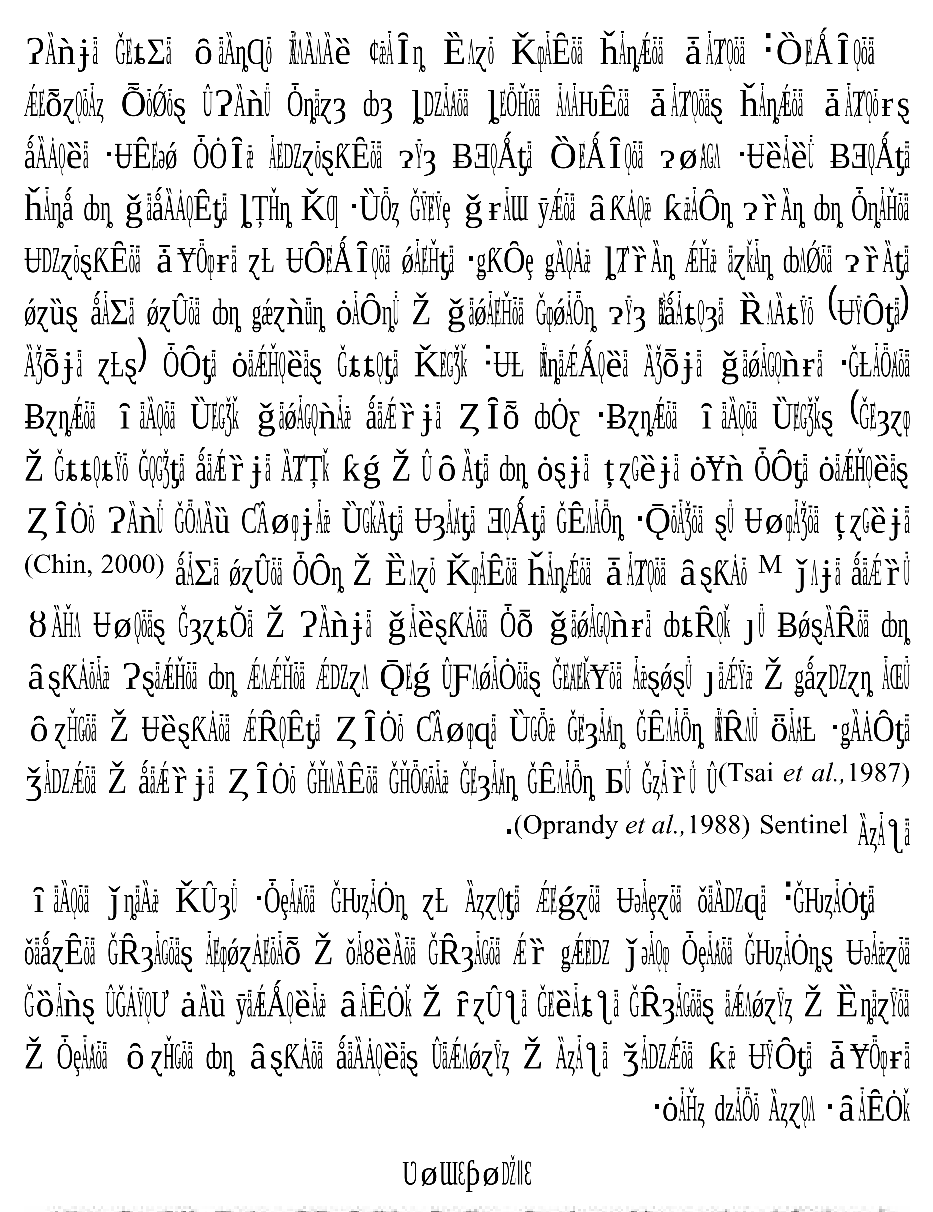
.(Nayac *et al.*,1986)

.(Monath *et al.*,1980)

sloth

.epizootic

.(Herbold *et al.*,1983)



(Chin, 2000)

(Tsai *et al.,*1987)

.(Oprandy *et al.,*1988) Sentinel

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SWINE VESICULAR DISEASE ăƥĭȐøǆƢǁɛ Ĭǂ Tĭǌɵǁɛ ƀɛƣǁɛ

ƣǂШǁɛ Ĭʒ ƖƑʒǦ ȐĬǅĦ ǌƥƢƈ ƕĭYǋǆ ƕĭƨǋƥĭʒ ǌǋɛƣY **ICD-10 B 08.8**

ICD-10 B 08.8 Other specified viral infections characterized ƕĭƱƑƢǅǁɛ ƕĭƖƷŬɛǋ
by skin and mucous membrane lesions

ÛȧÎÛöä åÄÀŋ ƙŎä ɃşÌφø âşĶʐş ʐĿş ÛɃÄÀÂøÀƖä ɄŸÔłʐΣä ŏäÆöä âşĶʐ ˸ğÌÆǦÊöä

[illegible] *Enterovirus* [illegible] 28 [illegible] B5 [1] [illegible]
PH [illegible]

[illegible] 6 [illegible] desiccation [illegible] 22 – 18 [illegible] 400 [illegible]
(Loxam and Hedger, 1983) [illegible] 780 [illegible]

[illegible] 1966 [illegible] 5 [illegible] episode [illegible] 1972 [illegible] 1973 – 1972 [illegible] aseptic [illegible]
1992 [illegible] 3 [illegible] 1975 [illegible] 1992 [illegible] 1979 [illegible]

[1] [illegible] B [illegible] 6 [illegible]

1980 ... 3 ... (1982 ... 14 ... 1981 ... 12 ... 1980 ... 60) ... 1982 ... Loxam and) ... (1982 ... 8 ... 1981 ... 5 ... 1980 ... 29) ... (Hedger, 1983; Knowles, 2003 ... 1972 ... (OIE, 2003; Escribano-Romero *et al.*, 2000) ... 1999 ... (OIE, 2003)

... B5 ... B5 ... antiserum ... B5 ...

... 7 – 3 ...

(Loxam and Hedger, 1983)

3 – 2 ... º41

coronary band

(dewclaw)

%5

snout ... %10

circling

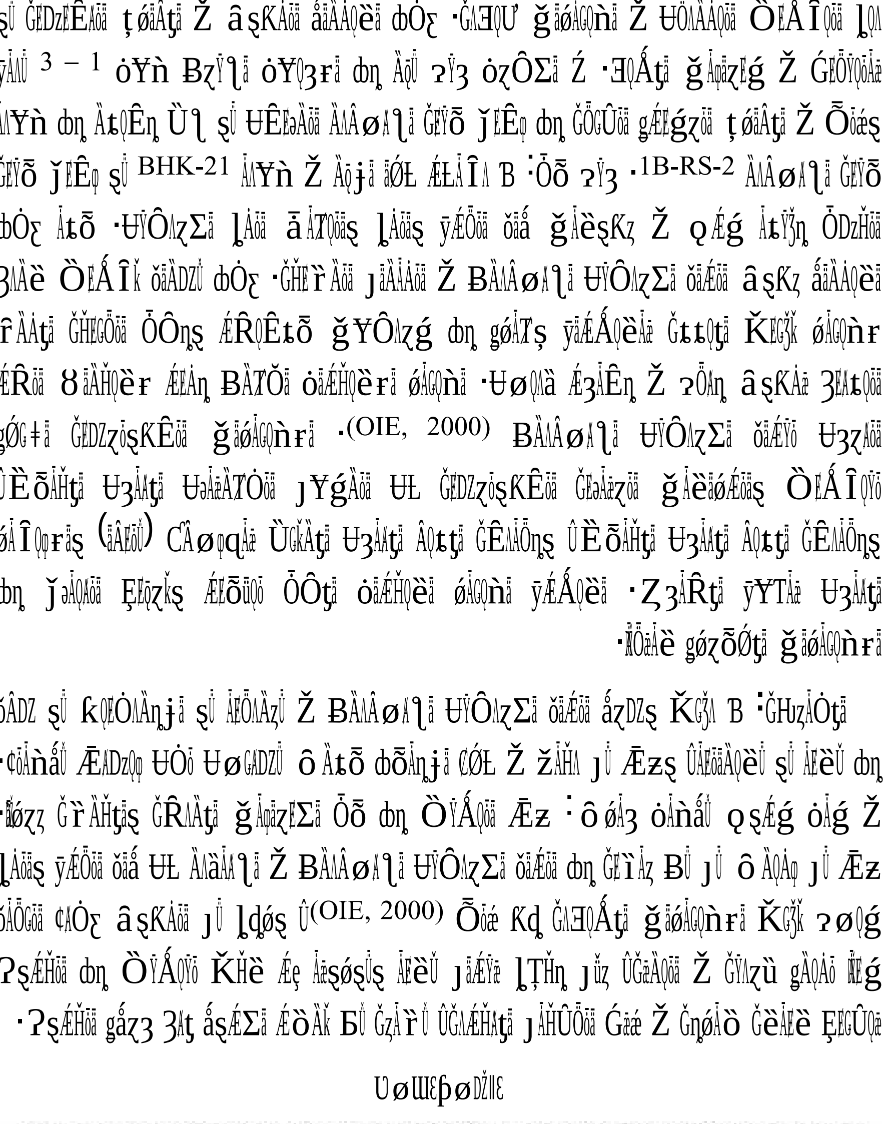
livestock

[illegible] Mann) [illegible] (and Hunchings, 1980 [illegible] rigor [illegible] (Mann, 1981) [illegible] mortis [illegible] livestock [illegible] (Fenner *et al.*,1993) [illegible]

[illegible]

[illegible] B5 [illegible]

[illegible]



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VACCINIA VIRUS INFECTIONS

ICD-10 B08.0
ICD-10 B08.0 Other orthopoxvirus infections

.*Poxvirus officinalis* Vaccinia

orthopoxvirus whitepox smallpox .mousepox

100 .1980 1977 2003

exfoliative

[illegible]

[illegible] 1975 [illegible] 1907 [illegible] 12 [illegible] 85 [illegible] %11 [illegible] 1931 [illegible] 8 [illegible] 3 [illegible] 27 [illegible] 5 [illegible] 1981 [illegible] 1968 [illegible] 10 [illegible] 935.3 [illegible] .(Cono *et al.*,2003) [illegible] 1.5 [illegible] 52.3 [illegible] 19 [illegible] (%52 [illegible]) [illegible] 36 [illegible] 12 [illegible] (%28 [illegible]) [illegible] 1959 [illegible] eczema vaccinatum [illegible] .(Cono *et al.*, 2003 [illegible] Lane *et al.*,1970) 1968 [illegible]

[illegible]

[illegible]

[illegible] 4 – 3 [illegible] .(CDC, 2003) [illegible] 3 – 2 [illegible]

[illegible] inadvertent [illegible] .(Cono *et al.*, 2003) [illegible] 9 – 6 [illegible] .(Cono *et al.*, 2003; CDC, 2003) [illegible] .(Cono *et al.*, 2003) [illegible] .(Cono *et al.*, 2003) [illegible] 12 [illegible]

.(CDC, 2003)

$7-2$

.umbilication

$14-10$

fomites

.(CDC, 2003)

23

5

.(Sepkowitz, 2003)

[illegible]

[illegible] chorioallamtoic [illegible] serially [illegible]

[illegible] (CDC, 2003) [illegible]

[illegible]

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VENEZUELAN EQUINE ENCEPHALITIS

ICD-10 A92.2

ICD-10 A92.2 Venezuelan equine fever

A ... *Alphavirus* ... (Young and Johnson, 1969) ... kinetic (1977) ... 6 ... I ... (VI ... I) ... 6 ... .chromatography

... 11 ... E1 ... E2 ... Rico-Hesse *et al.*,) ... (endemic ...) enzootic ... (I-C ... I-AB) ... C ... AB ... (1988 ... F ... F ... D ... (Pixuna) ... (Mucambo) III ... (Everglades) II ... (I-D ... I-E ... I-F) I ... (80 – 663 AG ...) VI ... (Cabassou) V ... IV

enzootic

enzootic

Belize

(Bijou Bridge … Tonate

Culex delpontei

(Sirivanakarn and Jakob, 1981)

(Calisher *et al.,* 1982) (I-F

.(Walder *et al.,* 1984) (I-D

1938

1861 … 1935

(Monath, 1979)

1992 ... 5 ... 1993 ... 61 ... 136

(Kahler, 1993) 1993

1995 ... (2 ... (1 ... (4 ... (3 ... 1993 ... 16 ... 185 ... 11.390 ... 475 ... 504 ... 14.156

(PAHO, 1995) ... 26 ... 1.258

1989 ... 15 – 5 ... 22

AG80 – 663 ... VI ... %51.6 ... I-AB ... %26.8

(TC-83)

6

VI

.(Contigiani *et al.*, 1993)

%83 %38 %40 %20

1969

50.000 38.000

1.2 20.000

5 – 2

4 – 1

asthenia

%0.2

%0.4 %4

[illegible] %20 [illegible] %11 [illegible] %14 [illegible] %4 [illegible] .(Sanmartin, 1972) [illegible]

[illegible] 21 [illegible] (I [illegible] C [illegible] AB [illegible] 3 – 1 [illegible] 2 – 1 [illegible] 6 – 4 [illegible] chattering [illegible] stupor [illegible] %80 [illegible]

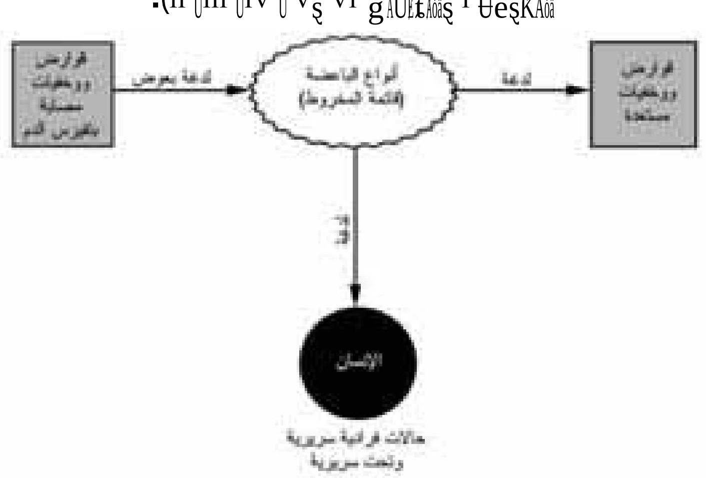
[illegible] (Sanmartin, 1972) [illegible] Soliped [illegible]

[illegible] (29 ، 28 [illegible]) [illegible] *Perom-* [illegible] *Oryzomys* ، [illegible] *Proechimys* [illegible] *Culex* [illegible] (*Sigmodon* [illegible]*yscus* [illegible]) [illegible] [illegible]*aikenii* [illegible] (*Melanoconion* [illegible]) [illegible] [illegible]*portesi* [illegible] *opisthopus* [illegible] Tonate [illegible] (III-B) [illegible] (*cedecei* I [illegible] D [illegible] E ، F [illegible]) [illegible] (II [illegible] III [illegible] IV [illegible] V [illegible] IV [illegible]) [illegible] VI [illegible] (Contigiani *et al.*, 1993) [illegible]

[illegible]

Walton *et al.*,) ... (1992

28. ... (D ، E و F ... (II ، III ، IV ، V و VI ... I ...



... 34 ... transmitter ... 8 ...

Psorophora confinnis

Mansonia *A. sallicitans* *Aedes aegypit*

Culex tarsalis *M. indubitans* *tittilans*

(Monath and Trent, 1981) *A. taeniorhynchus*

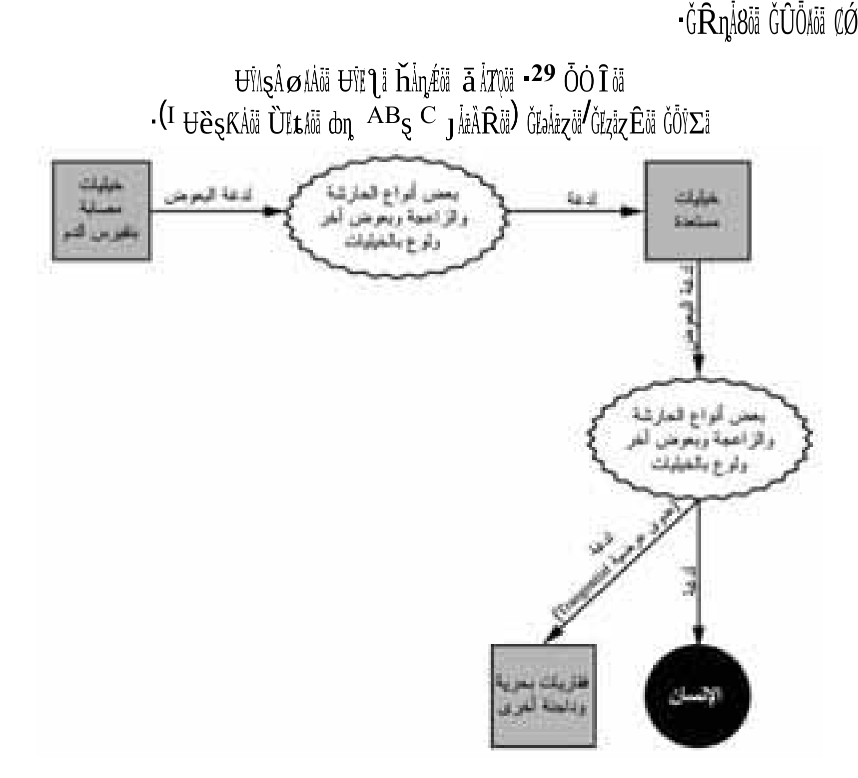
(Sanmartín *et al.,* 1973)

equinophilous

60 7 1961 – 1953

chromatography

(Monath, 1979) Sentinels



29

[illegible]

[illegible] .(Sanmartín, 1972) [illegible]

[illegible] 1943 [illegible] 83 [illegible] %90 [illegible] 6.000 [illegible] (%25 [illegible]) [illegible] Casamassima *et al.,)* [illegible] hydrops fetalis .(1987

[illegible] 15 [illegible] TC-83 [illegible] :1985 [illegible] 10 – 8 [illegible] – [illegible] %100 [illegible] 4 – 3 [illegible]

passing [illegible] TC-83 [illegible] TC-83 [illegible] 12 [illegible] *confinnis* [illegible] 928 [illegible] TC-83 [illegible] TC-83 [illegible]

[illegible] TC-83 [illegible] (Cole, *et al*., 1974) [illegible] (Barber *et al.,* 1978) [illegible]

[illegible] 1971 [illegible]

[illegible] 1969 [illegible] .(Sabattini *et al.,* 1985) [illegible]

[illegible] TC-83 [illegible] 28 [illegible] 6 [illegible] 28 [illegible]

.(Edelman *et al.,* 1979) [illegible] 14 [illegible]

[illegible] TC-83 [illegible] (VI [illegible]) [illegible] Roehrig *et al.,*) [illegible] .(1991

[illegible]

[illegible] malathion [illegible] extrinsic [illegible] Sentinels [illegible]

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[illegible]
VENEZUELAN HEMORRHAGIC FEVER

[illegible] ICD-10 A96.8

ICD-10 A96.8 Other hemorrhagic fevers caused by arenaviruses [illegible]

Tacaribe [illegible] Guanarito [illegible] Arenaviridae [illegible] *arenavirus* [illegible]

[illegible] 1989 [illegible] 26 [illegible] 1991 [illegible] 1990 [illegible] 104 [illegible] 1992 [illegible] 195 [illegible] %2.6 Tesh *et al.*,) [illegible] (1993 .(Salas *et al.*, 1998) [illegible] 4 – 3 [illegible] cyclically [illegible] .(de Manzione *et al.*, 1998) [illegible] .(Salas *et al.*, 1998)

[illegible] 11 [illegible]

Oryzomys [illegible] (*Sigmodon hispidus*) [illegible] 1992 [illegible] (Salas *et al.,* 1991) [illegible]

[illegible] 54 – 6 [illegible] 15 [illegible] (Salas *et al*., 1991) [illegible] crepitation [illegible] 9 [illegible] 15 [illegible]

[illegible]

[illegible] 57 [illegible] %10.5 [illegible]

[illegible] 1992 [illegible] 9 [illegible] 234 [illegible] (Tesh *et al*., 1993) [illegible] 4 [illegible] *S. alstoni* [illegible] 40 [illegible] 19 [illegible] 31 [illegible] 12 [illegible] 9 [illegible] *zygodontomys brevicauda* [illegible] 106 [illegible] 12 [illegible]

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VESICULAR STOMATITIS [illegible]

[illegible] ICD-10 A93.8
ICD-10 A93.8 Other specified arthropod-borne viral fevers

[illegible] (Sore mouth of cattle and horses [illegible]

[illegible] [illegible] .Rhabdoviridae [illegible] (*Vesiculovirus* [illegible] 17 [illegible] 70 [illegible] .*Lyssavirus* [illegible]

[illegible] (2 [illegible] 2 [illegible]) Cocal [illegible] (1 [illegible] 4 Indiana [illegible] (3 [illegible] 3 [illegible]) [illegible] Alagoas [illegible] New Jersey [illegible] .(4 [illegible] Chandipura [illegible] (Piry [illegible] .Isfahan [illegible] (Carajas [illegible] .1984 [illegible] Maraba [illegible] G [illegible] ((Gearhart *et al.*, 1987) [illegible]

G

(*Oryzomys*) 1939 1963 1964

(*Lutzomyia*) Tesh *et al*.,) *L. longipalpis* (1987 1979 – 1978 15 .(Prado *et al.,* 1979)

1970 1900

10 lineages 1998 1995 70

(Rodríguez, 2002)

74 (%57.4) 31 54 (Johnson *et al.,* 1966) %90 %9 %21 4 20 – 16 %63 %80 5 – 0 (Tesh *et al.,* 1969) 1983 – 1982 (Johnson *et al.,* 1969) %48

48 %22 .(Reif *et al.,* 1987) 52 %5.8

%83 %63

.(Tesh *et al.,* 1987)

.(Srihongse, 1969)

.(Hanson, 1981)

10

[illegible] .%100 [illegible] %10 [illegible]

[illegible] 14 [illegible] 1982 [illegible] 829 [illegible] .(1983 [illegible]) livestock [illegible] .1945 [illegible] 1982 [illegible] .(Hansen *et al.*, 1985) [illegible]

[illegible] 1992 [illegible] 1963 [illegible] 1939 [illegible] 1962 [illegible] 100 [illegible] 1984 [illegible] .1964 [illegible] .(Astudillo *et al.*, 1986) [illegible]

[illegible] livestock [illegible] 16 [illegible] %67 [illegible] %74 [illegible] .(Reif *et al.*, 1983) [illegible] %42 [illegible] %7 [illegible]

[illegible] 283 [illegible] 145 [illegible] 1972 [illegible] 477 Cadena and) ([illegible] 36 [illegible] 109) [illegible]

.(Estupitiñán, 1975

[illegible]

[illegible] 40 [illegible] 3 [illegible] .(Quiroz *et al.*, 1988) [illegible]

[illegible] 8.9 [illegible] Thurmond *et al.*,) [illegible] .(1987 [illegible] %30 [illegible] .(Mason, 1978)

Aedes

Lutzomyia trapidoi

sentinel

[illegible]

[illegible] 1982 [illegible] dipterans [illegible] ([illegible] midge [illegible]) *Culicoides variipennis* [illegible] (bluetongue [illegible]) [illegible] Anthomyiidae [illegible] Chloropidae [illegible] Simuliidae [illegible] *M. autumnalis* [illegible] *Musca domestica* [illegible] (Walton *et al.*, 1983) [illegible] *L. shannoni* [illegible] 6 [illegible] %50 [illegible] 610 [illegible] (Corn *et al.*, 1990) 1988 [illegible] (Comer *et al.*, 1990) [illegible]

(%40 – %30)

.(Zuluaga and Yuill, 1979)

acarids

1982 .(Stallknecht *et al.*, 2001)

4

latent

Simulium

Lord and)

.(Tabachnick, 2002

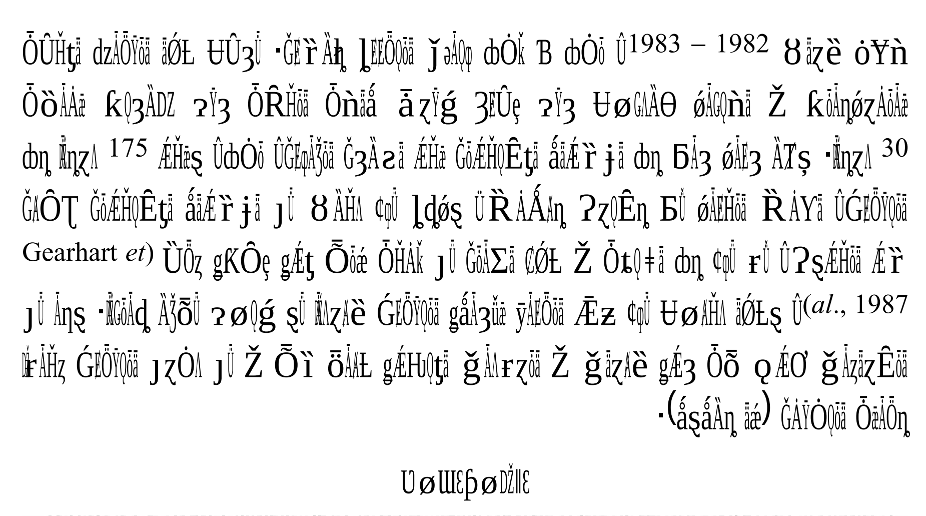
1982 .(Mason, 1978)

exudate

[illegible] (Alonso *et al.*, 1991) [illegible] Indiana [illegible] New Jersey [illegible] (Gomes *et al.*, 1989) [illegible] Vero [illegible]

[illegible]

[illegible] 3 [illegible] (Arbaláez *et al.*, 1982) [illegible] VSNJV [illegible]



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VIRAL HEPATITIS OF MAN AND NONHUMAN PRIMATES

B17 **B** **A; B16** **A** **ICD-10 B15**

B18

B19

ICD-10 B15 Acute hepatitis A; B16 Acute hepatitis B; B17 Other acute virat hepatitis; B18 Chronic viral hepatitis; B19 Unspecified viral hepatitis

C D B A [1]

A B parenterally B A C B B A

---

[1] Benenson (1990) Oubiña and Fay (1991).

B A E D .enterically

A picornavirus B .(Gust *et al.*, 1983) Hepadnavirridae C (Melnick, 1986) B A C B 50 – 30 .parenterale

D D B B B B D .nucleocapsid .B .B

B A E B 34 – 32 .(Bradley, 1990) labile

D C B A

[illegible] (*Papio cynocephalus*) [illegible] %36.2 [illegible] %29.9 [illegible] %11.3 [illegible] (*Saimiri sciureus*) [illegible] %5 [illegible] 9 [illegible] 5 [illegible] .(Eichberg and Kalter, 1980) [illegible] 4 [illegible] .(Zuckerman *et a*l., 1978) [illegible] (*Aotus trivirgatus*) [illegible] 145 [illegible] 100 [illegible] .(Lemon *et al.,* 1982) [illegible] 13 [illegible] (*Papio ursinus*) [illegible] 7 [illegible] 4 [illegible] .(Deinhardt and Deinhardt, 1984) cynomolgus [illegible] (*Macaca fascicularis* [illegible]) crab [illegible] 3 [illegible] 54 [illegible] [3] [illegible] 52 [illegible] 18 [illegible]

.(Cohen *et al.,* 1989) [illegible] 16 [illegible] [3]

[illegible] 52 [illegible] 6 [illegible] 54 [illegible] .(Burke and Heisey, 1984) A [illegible] 3 [illegible] Smith et)) [illegible] %50 [illegible] 4 [illegible] A [illegible] (al., 1980; Lancet, 1981 [illegible]

[illegible] (Aotus trivirgatus) [illegible] MS-1 [illegible] A [illegible] Lemon and) [illegible] genomic [illegible] heterogeneity [illegible] .(Binn, 1983 Lemon et al., 1987;) [illegible] A [illegible] .(Brown et al., 1989

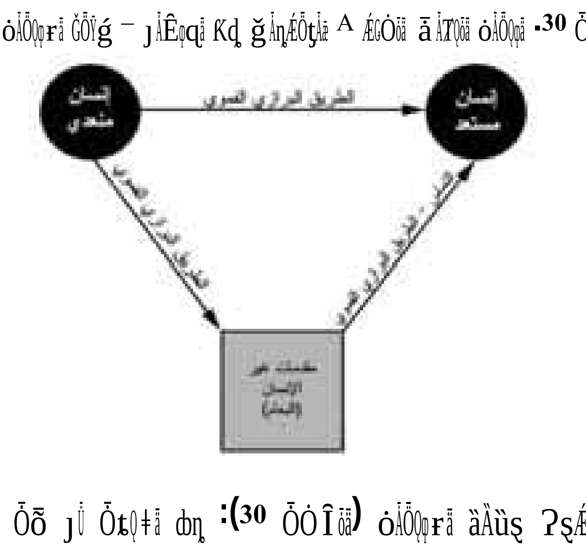
[illegible] A [illegible] B [illegible] 6 – 3 [illegible] 90 – 60 [illegible]

[illegible] .intercurrent [illegible]

(IU 15 – 0) IU 85 (– 0.5 – 0.01) 2

Sanguinus ... *mystax* ... *Sanguinus mystax* ... .(Deinhardt, 1976)

.30



:(30) ... 173

[illegible] [151] [illegible] [6] [illegible] [B] [illegible]

[illegible] [A] [illegible]

(Lemon *et al.*, 1982) [illegible] *A. trivirgatus* [illegible] [A] [illegible] [A] [illegible] [A] [illegible]

[illegible] [A] [illegible] apes [illegible]

parenteral

(Kessler *et al.*, 1982)

(HB_sAg)

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WESSELSBRON DISEASE

ICD-10 A93.8
ICD-10 A93.8 Other specified arthropod-borne viral fevers

B *Flavivirus* Togaviridae 50 – 40

%50 36 54 17 83 (Henderson *et al.,* 1970) 141 48 9

.(Coetzer and Theodoridis, 1982)

.(Baba *et al.*, 1989) %100

%50

Blackburn and Swanepoel,)

.(1980

1996

.(Jupp and Kemp, 1998)

Aedes circumluteolus

A. caballus

A. lineatopennis

Desmodillus

Williams *et al.*,)

(1997

Baba, S.S., A.H. Fagbami, S.A. Omilabu. Wesselsbron virus infection in West African dwarf goats (*Fouta djallon*): Virological and immunological studies. *Acta Virol* 33:81–86, 1989.

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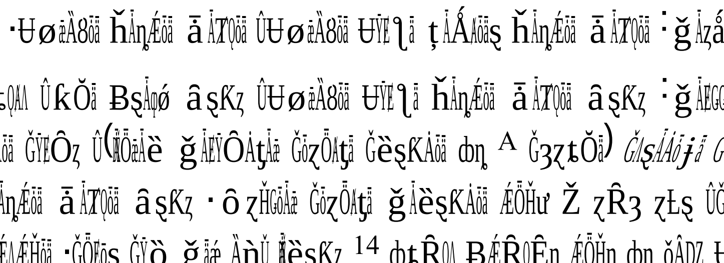
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WESTERN EQUINE ENCEPHALITIS

ACD-10 A83.1



[illegible] Aura [illegible] (Highlands J) J [illegible] pathogens [illegible] .(Calisher *et al*., 1988) [illegible] neurovirulent [illegible] neuroinvasive [illegible] J [illegible] 5 [illegible] Bianchi *et al*.,) [illegible] J [illegible] .(1993

[illegible]

[illegible] 941 [illegible] .1978، 1955 [illegible] 1976 [illegible] 4، [illegible] 133 [illegible] 1975 [illegible] .(CDC, 1981 and 1982) [illegible] 1982 [illegible] 1941 [illegible] 3.000 [illegible]

[illegible] – [illegible] 1.150 [illegible]

(Karabatsos *et al.*, 1988)

(Aviles *et al.*, 1993)

%20 [illegible] .%50 [illegible] %30 [illegible]

[illegible]

[illegible] (31 [illegible] passerines [illegible] 15 [illegible] 10 [illegible]

[illegible] *Culex tarsalis* [illegible] *Aedes dorsalis* [illegible] Monath and) [illegible] .(Trent, 1981 .(Hardy *et al.*, 1979) [illegible]

[illegible]

31

(Pituophis, Thamnophis, Coluber) cyclical

84 37

Thamnophils

179 50 (Rana pipiens)

[illegible] *Ades dorsalis* [illegible]

[illegible] .(Fubhorst *et al.*, 1994) [illegible]

[illegible] *culiseta inornata* [illegible] .(Monath, 1979) [illegible]

Culiseta [illegible] *melanura* [illegible] Hayes and Wallis,) [illegible] .(1977

[illegible] *Culex ocossa* (Sirivanakarn and Jakob, 1981) [illegible] *Aedes albifasciatus* [illegible] 16 – 9 [illegible]

Aviles *et*) [illegible] *Aedes albifasciatus* [illegible] .(*al*., 1992 [illegible]

[illegible] .(Walton, 1992) [illegible] 4 [illegible] Calisher *et al*.,) M [illegible] .(1986

[illegible] (%80 [illegible]) [illegible] (%43.8 [illegible]) [illegible] (%56.3 [illegible]) [illegible] %90 [illegible] presumptive [illegible] .(Calisher *et al*., 1983) [illegible]

[illegible]

[illegible] 10 – 7 [illegible] – *ablifasciatus* [illegible]

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WEST NILE FEVER [illegible]

ICD-10 A92.3

[illegible] [4] [illegible] (*Flavivirus* [illegible] 53 [illegible] Eg 101 [illegible] 4 [illegible] 5 [illegible] (Morvan *et al*., 1990).

[illegible] 1 WN [illegible] (lineages [illegible] 2 WN [illegible] enzootic [illegible] 1 WN [illegible] 1996 [illegible]

---

[4] [illegible] B [illegible]

(ROM96) 1998 ROM96

(Isr98) 2000 1997 NY99

NY99

(Petersen and Roehring, 2001).

1999

Nash *et al*.,)

(2001

900 2000 12

(Marfin *et al*., 2001).

(Tesh, 1982).

1974

%55

(McIntosh *et al.*, 1976) %16

1.168

%61

(Taylor *et al.*, 1956)

237

%55 %50 1983

156 %13

%8 1985

Culex tritaeniorhynchus

Sugamata *et al.*,)

(1988

375 183)

6 – 3

6

.%25 ... %10 ... 1964 – 1962

(*Corvus corone sardonius*)

.(Taylor *et al*., 1956)

(32

Corvus corone) (*Calumba livia*)

(*Sylvietta rufescens*) crombec (*sardonius*

(*Streptopelia turtur*)

.*Culex*

univittatus

vishnui
molestus
argasid Aedes anopheles
ixodid

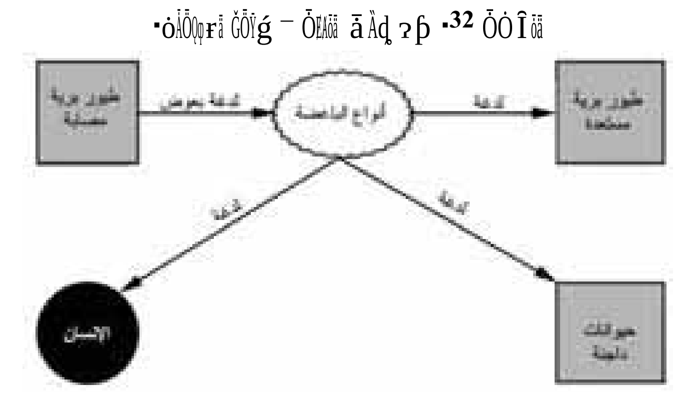
univittatus
sentinel
Aedes albopictus
Abassy et al.,) (Baqar et al., 1993) tritaeniorhyncus
(Abassy et al., 1993) Argas arboreus (1993
corvids (Corvus brachyrhnchus) 1999
%100
1955 NY99
Passer) (Corvus corone)
101 (domesticus

2000 1999
5 2000 14
pipiens (nucleic
restuans

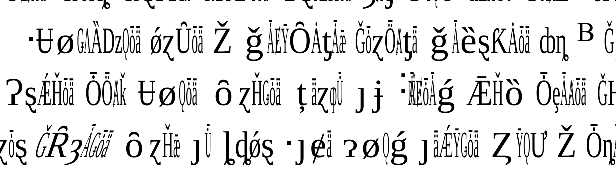
Cx. salinarius ... 2000 ...

... Culex ...

32



(Porter *et al.*, 1993).





Abassy, M.A., M. Osman, A.S. Marzouk. West Nile virus (Flaviviridae: Flavivirus) in experimentally infected *Argas* ticks (Acari: Argasidae). *Am J Trop Med Hyg* 48:726–737, 1993.

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YELLOW FEVER

A95.1 ... ICD-10 A95.0

ICD-10 A95.0 Sylvatic yellow fever; A95.1 Urban Yellow Fever

.Black vomit

... [5] ... *Flavivirus* ... Flaviviridae ... 40 ...

... *Aedes* ... *aegypti*

---

5 ...

[illegible]

[illegible] 1950 [illegible]

[illegible] 1954 [illegible] 1942 [illegible]

[illegible]

[illegible] 200.000 [illegible] %90 [illegible] 30.000 [illegible] 1983 [illegible] 1965 [illegible] 2.252 [illegible] (Mutebi and Barrett, 2002) [illegible] 304 [illegible] 1966 [illegible] 183 [illegible] 368 [illegible] (%49.7 [illegible]) 1982 – 1981 [illegible] 1981 [illegible]

[illegible] %70 [illegible] 211 [illegible] 235 [illegible] 1987 [illegible] 179 [illegible] 170 [illegible] (WHO, 1989). [illegible] 69 [illegible] 88 [illegible] 1989 [illegible] 191 [illegible] 237 [illegible] 175 [illegible] 1992 [illegible] 81 [illegible] 119 [illegible] 1991 [illegible] 90 [illegible] 151 [illegible] 1990 [illegible] 79 [illegible] 1993 (WHO, 1995).

[illegible] 1973 – 1972 [illegible] 1:9 [illegible] (Pinheiro *et al.*, 1978) [illegible] 44 [illegible] 71 [illegible] B [illegible] 39 – 20 [illegible] *Haemagogus* [illegible] 1998 [illegible] (Vasconcelos *et al.*, 2001b) [illegible] 8 [illegible] 24 [illegible] 8 [illegible] 23 [illegible] 1999 [illegible] 77 [illegible] 2000 [illegible] 39 (Vasconcelos *et al.*, 2001a).

[illegible]

[illegible] 1960 [illegible] 1947 [illegible] 12 [illegible] %80 [illegible]

[illegible] 4 [illegible] (2 [illegible] (1 [illegible] (3 [illegible] (Woodall, 1981) [illegible] (4 [illegible] (Groot, 1980) [illegible]

[illegible] inactivity [illegible] 1979 – 1978 [illegible] 30 [illegible] 1981 [illegible] 19 [illegible] 1979 – 1978 [illegible] %96.4 [illegible] 5 [illegible] 10

.(CDC, 1980; PAHO, 1983b) [illegible]
(WHO, 1993) [illegible] 33 [illegible]
[illegible]
[illegible] 100.000 [illegible] :1962 – 1960
[illegible] .1969 [illegible] 1965 [illegible]
[illegible]
2.561 [illegible] 1990 [illegible] (341 [illegible]) 4.248 [illegible] 1989 [illegible] (618 [illegible]) 3.270 [illegible]
.1993 [illegible] (38 [illegible]) 218 [illegible] 1992 [illegible] (21 [illegible]) 176 [illegible] 1991 [illegible] (661 [illegible])
WHO,) [illegible] 1.518 [illegible] 10.207 [illegible]
[illegible] (1 [illegible] .(1995
[illegible]
[illegible] *africanus* [illegible] (2 .*simpsoni*
[illegible]
[illegible]
.(Varma, 1989) [illegible]
[illegible] 15 [illegible]
[illegible]
.(Mutebi and Barrett, 2002) [illegible]

[illegible]
.(*Alouatta* [illegible])
[illegible]
[illegible]

[illegible]
[illegible] %90 [illegible]

[illegible] 6 – 3 [illegible]

[illegible] WHO,) [illegible] .(1985

[illegible]

[illegible] Faget [illegible]

[illegible] prostration [illegible]

[illegible] 4 – 3 [illegible]

[illegible] decompensation [illegible]

[illegible]

[illegible] 10 [illegible] (WHO, 1985) [illegible] %5 [illegible] mottled [illegible] metamorphosis [illegible] – Councilman [illegible] – [illegible]

[illegible] %20 [illegible] %10 [illegible] 30 [illegible] 25 [illegible] (Monath, 1987; PAHO, 1987) [illegible]

[illegible]

[illegible] [6] [illegible] (*Aotus* [illegible]) [illegible] (*Cebus* [illegible]) [illegible] (*Alouatta* [illegible] (*Callithrix* [illegible]) (marmoset [illegible]) [illegible] (*Ateles* [illegible] (*Saimiri* [illegible]) [illegible] (*Macaca* [illegible]

[illegible] 24 [illegible] 36 – 24 [illegible]

[illegible] (33 [illegible]) [illegible] jungle [illegible] urban [illegible] 12 – 10 [illegible] [6] [illegible]

[illegible] [6] [illegible]

[illegible] *H. spegazzini* [illegible] *H. Janthinomys* [illegible] *Haemagogus* [illegible] *spegazzini* [illegible] *Sabethes chloropterus* [illegible] *Aedes leucocelaenus* [illegible] *Sabethes chlor-* [illegible] *opterus* [illegible]

[illegible] contiguous [illegible] (*Cebus* [illegible]) [illegible]

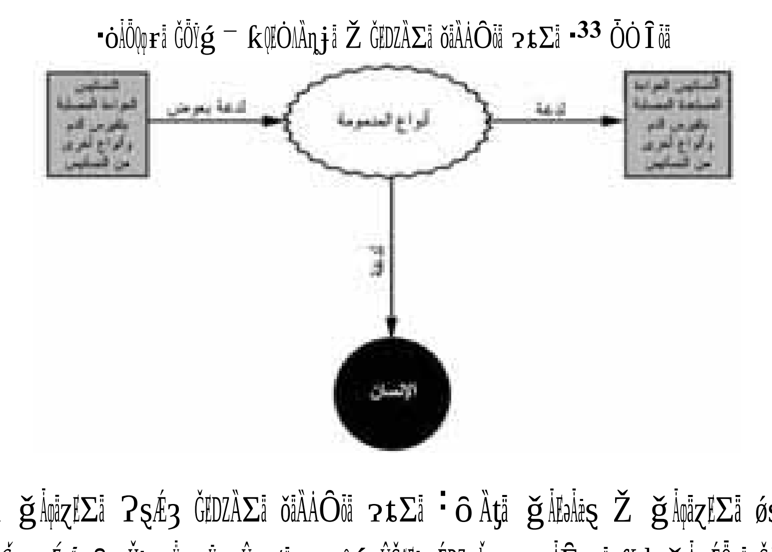
[illegible] (*Bassaricyon gabbii*) olingo [illegible] (*Potos flavus*) ([illegible]) kinkajou [illegible] .(Strano *et al.*, 1975) [illegible] .(Woodall, 1981) [illegible]

[illegible] 100.000 [illegible] 1962 – 1960 [illegible] 30.000 [illegible] (*Papio* [illegible]) [illegible]

[illegible] *furcifer-taylori* [illegible] *opok* [illegible] .*luteocephalus* [illegible] .*Amblyomma variegatum* [illegible]

.(WHO, 1985) 1979 – 1978

(*Cercopithecus*) Colobus (*Papia*) (*Erythrocebus patas*) patas Seymour and Yuill,) (*Galago*) bushbabies (*Colobus*) .(1981



.(WHO, 1985)

M

Monath and Nystrom,)

(1984

(Deubel *et al.*, 1983)

4 – 3

17D

(Rice *et al.*, 1985)

(De Brito *et al.*, 1992)

17D

10

lyophilized

1989 … 1993 … (WHO, 1993) … %11 … 6 … 1960 … 1940 … 4 … 17D … (WHO, 1986) … (Brés, 1986)

1966 … 17D … 250 … 39 … (P-16065) … P16065 … 17D-204 … epitope (Jennings *et al.,* 1994) … virulent … neuroinvasive … quality … reversion … 2001 … virulent … 7 … 2001 … (Chan *et al.,* 2001) … viscerotropic … 17D …

ĞŒÒΛÀŋɟä ÂõäÀƫä ƘȞĞù ĞΛÊöä Õŷǩ Àǹäşǐ Žş û(Cetron *et al.,* 2002) ğÆĦǪƫä ğÀÀɍƶöä CDC,) ŏäÀÂÔöä ʔȶΣä Æȉ ǴŒÕŷǪŷö update ğǯΛÆǵ ğÀÆòƶǩ ÀȽÀŋ ĞΛÀęƶöäş ôäÀŋɟä ĞĦƶÀÒƫ .(2002

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